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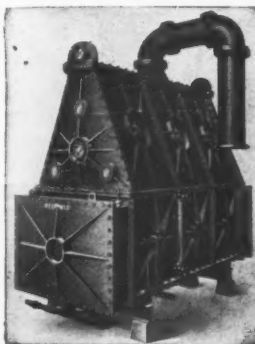
NATIONAL PROVISIONER

CHICAGO AND NEW YORK

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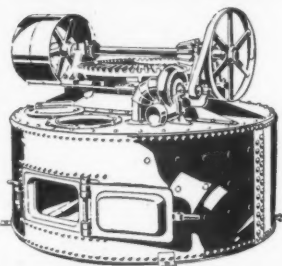
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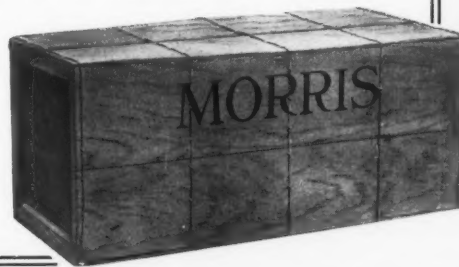


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THE NATIONAL PROVISIONER

OFFICIAL ORGAN OF THE INSTITUTE OF AMERICAN MEAT PACKERS AND THE AMERICAN MEAT PACKERS' TRADE AND SUPPLY ASSOCIATION

PUBLISHED EVERY SATURDAY

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Vol. 63.

Chicago and New York, October 9, 1920.

No. 15.

ESSENTIALS IN MEAT PACKING

Basic Elements in Packinghouse Practice Outlined

Meat packing as it is practised today is a highly specialized manufacturing industry. It long ago outgrew the swaddling clothes of a mere slaughtering business, and no packer can show a profit today who does not understand and practice modern methods of saving waste and utilizing all possible by-products.

Every packer is eager for information concerning the latest methods and the best formulas. It is not surprising, therefore, that the most popular feature of the work of the Institute of American Meat Packers during the past year was that of the Committee on Packinghouse Practice. This consisted chiefly of a series of articles on the fundamental features of packinghouse operation, and a department of information conducted on the question-and-answer plan, both of which were published through the columns of THE NATIONAL PROVISIONER, the official organ of the Institute.

The annual convention at Atlantic City afforded an opportunity to review the work of the year, the progress made, and to outline plans for the future. In his annual report, read to the convention and printed in the Convention Number of THE NATIONAL PROVISIONER, Chairman W. B. Farris covered this ground comprehensively.

But to afford wider opportunity for discussion the committee held a group luncheon meeting at which matters of packinghouse practice were taken up and reviewed in a more intimate way. This meeting was very largely attended, and its result was to stimulate new enthusiasm for the work. Following is a report of the session, presided over by Chairman W. B. Farris:

CHAIRMAN FARRIS: I have before me many questions which have been sent in by members of the Institute. I do not know whether we will get around to a general discussion of all these questions today, but if we do, I hope the discussion will be from an informal standpoint, and everybody will get in and have his say. We are here for educational purposes, to help each other. In fact, the Committee on Packinghouse Practice have asked from time to time that the members of the Institute give us all the help and support they possibly could, and I think they have done so.

This is in its infancy—the packinghouse practice work—and we feel there is a great field in it if we will all come together and work out our problems. Some of these questions, in some phase or other, have been answered from time to time, but they are put in various forms, and we will try

to answer them, if not here, through THE NATIONAL PROVISIONER.

(Here list of queries was read.)

The first three subjects mentioned were combined in one: What is the basic feature fundamentally in packinghouse business? That was discussed through THE NATIONAL PROVISIONER in different forms. I received many replies from members of the Institute as to what in their minds was the basic feature of the packing business. It ranged through every section of the business, such as finance, organization, good products, advertising, low cost of producing and many others. In fact, one man wrote in and said the most important feature in the packing business was steam. If we did not have steam we could not run. I do not think there is any argument on that.

I have written here my version of what is the basic feature of the packing business. I selected that for the reason that there were so many opinions as to what was that basic feature that I thought it would be an excellent opportunity to have discussion from all the different angles on that subject.

FUNDAMENTAL FEATURE OF THE PACKING BUSINESS.

By Wm. B. Farris, Gen. Supt., Morris & Co.

What is the basic or fundamental feature in the packing business? This is the question which has been discussed since the inception of the packing business in all its different phases, and many opinions have been given. Each one backed up their opinion by good, sound logic, but I think I can safely say that it still remains an unsettled question.

In selecting this subject, I had in mind the many opinions given by members of the Institute of American Meat Packers to the Committee on Packinghouse Practice,

such as finance, organization, good product, advertising, low cost of producing, an efficient sales organization, and many others. Considering the difference of opinion existing on that question, I thought it would be a good subject to stimulate discussion in our around-the-table talk at this luncheon, and I hope that those who differ with me will not hesitate to air their opinions at this time.

I assume it is only natural for those engaged in the different branches of the packing business to contend that in their branch, or some part of their branch, will be found that fundamental feature which is most necessary to the success of the business, and in most instances a very plausible argument can be given for that contention.

For instance: the buying division will inform you that the foundation of the business is the buying; the operating division is equally as positive that the success of the business is found in its division. The sales department can give many reasons why its end of the business should be considered as having that basic feature, and the advertising department will contend that advertising is the ever-important factor.

It is admitted and, I think, is beyond any doubt, that all these divisions, properly functioning and giving their full quotas of efficiency, will make any business a success. In fact, it requires the combined efforts of all these divisions, co-operating and co-ordinating, to obtain the highest degree of success.

Some One Most Important Factor.

But the thought at this time is: If the packing business as a whole were analyzed by a neutral and unbiased mind, would it not be found that somewhere in one of the branches mentioned lay some fundamental feature or features which could be considered really the foundation of the business—some factor or operation which stands out alone to the extent that the success of all other branches are dependent on the factor in question? I think it can be proved that such a factor exists.

Some years ago, in the old days, when hogs could be bought for around 5 cents per pound, and other livestock as correspondingly low, it was nothing unusual to hear an operator state that the success of the business was to "buy low and sell high." No doubt at that time there may have been considerable merit in that contention for the packing industry; that was more a killing and curing business.

Since then many other branches have been added to the large packing establishment, and the industry had not at that time reached the scientific development it now enjoys—due in a measure to keener competition and a demand for better and higher class product. It does not seem reasonable that a buyer can continually buy lower than his competitors, but it does seem reasonable, and I think it is a fact, that an efficient selling organization can sell at a higher figure than competitors, providing the product handled is the kind and quality that the trade would be willing to pay a premium for.

I feel quite confident that a sales organ-

Livestock Losses

The next report in this series will be that covering the work of the Committees on Eradication of Livestock Diseases and Bruised and Other Livestock Losses. This includes some striking evidences of meat losses through bruised livestock, as well as the known enormous economic loss due to condemnation of meat animals for tuberculosis and other diseases. It will appear in full in the next issue of THE NATIONAL PROVISIONER.

ization, irrespective of its skill in selling, would not be able to command a premium if the product handled was not of as good quality as the same line sold by competitors. Then, the deduction I make is that good product is the basis or fundamental feature of the packing business.

Good Product Is the Foundation.

Good product is the foundation of the packing business. The success or failure of an operator depends on the class of product he places on the market; the quality of product that he places on the market decides whether he is able to expand his business or not.

Now, what is good product? I think that is a question which should be analyzed, for we all know that it is possible to make product too good. For instance: we can take hams or bacon and cut away or grade away all profit. This applies, in some form or other, to all product, edible or inedible, turned out of a packing plant. Good product is uniform and dependable, and must satisfy the trade to the extent that it will repeat. Product must be as good, and have all the qualities a sales organization claims for it. Product must measure up to the standard set by an advertising department. In fact, the success of the distributing end of the business, sales and advertising, is based on good product.

I am not unmindful of the fact, in describing what I consider good product, that it must be made economically. Yields obtained and cost of producing have a great bearing, and unless these two factors are considered a severe handicap is placed on the selling organization and, although it may handle good product, a high production cost or poor yields, or both, may cause the product to cost more than it can be sold for, and thereby wipe out all margin of profit.

So it should be borne in mind that good product is the basis of the packing business, and to it, more than any other factor, may be attributed the success or failure of the operator. But in making a good product he must also get 100 per cent yield, wherever that amount is possible, and he must also produce the good product at a reasonable cost price, or, in other words, good product economically made is the basis or fundamental feature of the packing industry.

Its Effect on the Organization.

I have one more thought on this subject which I think will have a tendency to strengthen my contention, and that is the psychological effect good product has on an organization. Some time ago I attended a meeting given by the sales, advertising and credit departments of a large packing concern.

This meeting was for educational purposes, and all the employees in the three divisions mentioned were in attendance. Short talks were made by the heads of the divisions, outlining method of handling advertising, credits and selling, and I was much impressed by the general attitude of each speaker.

For instance: the credit man stated how he used the cut-off or placed a limit on the amount of credit he gave to certain customers, and that he handled this in such a way that the customer was not dissatisfied. The head of the advertising department followed, and he described how he heralded to the world, by press and billboard, the merits of the goods he advertised. Several heads of different sales departments, with the same assurance, told how they manipulated their end of the business.

And the thought came to me: What is back of all this? What is it that gives these men the confidence in their ability to do things as described? What is it that makes a success of their efforts in distributing the product of a large packinghouse to the trade in general? What is it that makes them all enthusiastic in what they are doing? It was the fact that they were handling a dependable product, and each one had the assurance that his representa-

tion to the trade was found in the product. Good product made them a success in their different divisions.

I went a little farther and thought: What if this situation was reversed? What would be the psychological effect if they were handling a product that was not wanted by the trade, and which did not compare favorably with that of competitors? Why, they would lose all those qualifications which they were then using in their different lines of work, and that would mean failure. From that deduction I was more than ever convinced that good product, economically made, was the basic feature in the packing industry. (Applause.)

Now, gentlemen, that is only my version on that subject, and the meeting is open for discussion, as no doubt many of you gentlemen, in fact, all of you, have some ideas on that. We would like to hear them. If nothing is said, I will have to take it for granted that I am right.

One question that I think has a great deal of bearing on the business is what is the cause of sour meats, especially hams. I want to say on that subject that we have a man with us, Dr. Lowen-



WM. B. FARRIS,
(Morris & Co., Chicago.)
Chairman Committee on Packinghouse Practice.

stein, vice-president of Wilson & Company, who started some years ago making exhaustive tests in experimental work through the laboratory on bacteria that causes our meat to sour. I think that Dr. Lowenstein is probably the first man who ever went into that matter so deeply. A little later on he worked in connection with the Bureau of Animal Industry in its chemical department. Dr. Lowenstein is with us. I think he can give us some very good information as to what causes the sour meats, and the way of arresting it, and other particulars.

PREVENTION OF MEAT SOURING.

By Arthur Lowenstein, Vice-president, Wilson & Company.

MR ARTHUR LOWENSTEIN: When Mr. Farris stated that the question as to the cause of souring of meat had been asked, a man sitting next to me said, "Cure them right." This is, of course, the proper answer, particularly in connection with the souring of hams.

There are, however, a number of fundamental points that have to be considered in connection with the prevention of souring of meats, because it is largely a preventive proposition.

You are all familiar with some of the recent developments of preventive medicine. You know there are certain kinds of bacteria with us all the time. You know that there are pneumonia bacteria present here, and yet we do not all have

pneumonia. And you know, more or less, about the theories of resistance of man to disease, and all of that sort of thing, which enters into this problem of medicine.

It is the same way, more or less, with these animals. There are plenty of bacteria around the hog when he comes into your establishment. But during the period when the hog is alive he has certain powers of resistance, and consequently is not invaded by the bacteria to which he is the host. But just as soon as you start to shackle the hog you have to begin to watch and take certain preventive measures. You are liable to bruise or injure the hog in the shackling process. When you hoist it on to the wheel and start it through the various processes your problem in the prevention of the invasion of bacteria begins.

Cleanliness the First Requirement.

I would say that there are three fundamental points involved. Cleanliness, perhaps the first and foremost, temperature control, and control of the concentration of the various curing solutions.

In other words, you have to keep things clean right from the beginning. In the curing cellar you must take care of your vats, also all of the various utensils used, and see that they are kept clean. Even the thermometers which you use to test the temperature of the ham should be kept clean. Otherwise you may introduce bacteria into the product in the early stages, and then later if your temperature conditions are not correct, or if you have not enough salt in your pickle, or if you have not the proper chemical control of the solution, you are liable to get into trouble.

So, I would say, Mr. Chairman, the answer to the question as to the cause of souring of meats is largely the action of bacteria, brought about by lack of cleanliness, improper temperature control, or improper curing solutions.

The whole curing process is essentially a bacteriological one. You have all known for many years that the function of saltpeter is to give the meat a red color. And while you have added only a simple chemical in the curing process, it does not act as a simple chemical, because if you added sterile pickle to the hams and to the vats, you would not obtain a red color in your meat. In other words, bacteria must be present, of the right kind, to start to work and change the saltpeter or potassium nitrate or sodium nitrate into a new form known as nitrite, which combines with the coloring matter of the blood and produces a combined form which gives a permanent red color to the meat.

So much for that phase of saltpeter. The concentration of the saltpeter is also an important factor in that it inhibits or prevents the development of certain objectionable bacteria, which you always have around and which act in a way you do not desire in the product that you are trying to turn out.

Function of Sugar in Curing.

Then there is the sugar in the pickle. You look at the pickle vats and see bubbles coming up in the vat all the time, and I do not know whether you ever asked yourself what was the cause of these bubbles. You are all familiar with the fermentation process since the country has gone dry. Most people are interested in simple home fermentations. (Laughter.) That is what is going on in these vats, and you have been doing what bacteria like, as that is the way to promote their growth and activity. But you have to control it or it will get away from you.

The old packers in this business did not know about bugs and bacteria, and did not know the names of the chemical substances that they used, but they turned out a fine quality of meat. They worked by the method of trial, and tried things until they found a method which worked best, and in spite of the study that had been given to the subject from a chemical and bacteriological standpoint in the past few years, very little has developed as to

(Continued on page 25.)

Meat Packers' Head on Industrial Situation

"Can American industry be contracted toward normal dimensions without tragic economic results?"

An affirmative answer to this question was given at Boston last Monday by the leader and official spokesman of the largest industry in the United States when Thomas E. Wilson, President of the Institute of American Meat Packers, told investment bankers from all sections of the country that "every essential business rendering a genuine service, no matter how serious its problem, may face the future with abiding confidence."

Mr. Wilson, speaking on "The General Industrial Situation" before the Investment Bankers' Association of America, dealt frankly with declining prices, shrinking inventories, closing of plants, careless rumors of panic and industrial collapse and other factors in the current industrial outlook. He said in part:

"The pressing necessity of the present is to maintain a courageous and optimistic morale. The descent from the heights of abnormal production to the normal levels of peace times should be reached by gradation and not by perpendicular drops. No industry upon which large bodies of labor are dependent for a livelihood, or upon which a considerable number of producers are dependent for a market for their raw material, has a moral right to close its doors in such a time as this merely to prevent a shrinkage in accumulated surplus, or for the purpose of limiting production so as to create artificial values for materials on hand. To do so is to take advantage of extraordinary conditions, the burden of which should be shared by all. I am glad to say that we have had but few such examples."

At another point, Mr. Wilson said:

"Timid men have asked the question, 'Can American industry which was expanded to record proportions under the forced draft of war necessities be contracted toward normal dimensions without tragic economic results?' Representing, as I do, probably the largest industry in the country, and taking a philosophical view of the present and a hopeful outlook for the future, I feel that the question can be answered in the affirmative. There may be pessimists here and there who are apprehensive that only a panic can result from the extraordinary world conditions created by the war. In my opinion such a catastrophe is not probable so long as the true American spirit continues to animate our institutions."

Production Need Not Be Curtailed.

In discussing the industrial situation as it exists today, Mr. Wilson declared that there is "no shortage of raw material sufficiently serious to curtail production below normal requirements."

"Most manufacturers," he added, "are fairly well supplied with orders for their products, notwithstanding some cancellations. Transportation facilities show steady improvement."

"The process of readjustment is now in full motion," Mr. Wilson declared. "The manufacture of luxuries is being curtailed. The spending fever is abating. Commodity prices are declining and further deflation seems to be in progress. A recent survey has been made of the industrial conditions of our country which shows that economically the United States is better off than any other country of the world."

"Favorable crop reports come from every section. While declining prices have caused some disappointment, yet generally speaking the farmers are in a sound eco-

nomic position. The producers of livestock have been more seriously affected by declining markets than any other branch of farm activities. There is little evidence of idleness throughout the country, except in a few localities. So far as the distribution of labor is concerned, the situation nationally appears to be well equalized, with the exception of temporary shortage of unskilled labor in some of the agricultural regions."

"While money is still tight, it should not continue so indefinitely. There is great encouragement to be drawn from the fact that there has been no substantial decrease in bank deposits during the last few months. Individual saving accounts show marked improvement. This seems to indicate a movement toward thrift, and that the period of reckless and extravagant spending is past. Discounting of bills by industrial concerns appears to be very general. The business outlook appears to

be good in nearly every section. The survey shows that a shortage of coal and a failure to increase individual productivity appear to be the only two unfavorable aspects of the immediate industrial situation."

Labor Has Its Problems to Solve.

Mr. Wilson stated that labor has had some difficult problems to solve and "some grave internal difficulties to overcome," and added:

"It has been disturbed by a radical minority seeking to revolutionize industry and to overthrow many of the time-honored traditions of American institutions. The thoughtful conservative forces of labor seem to be in the ascendancy; and will no doubt lead to a sound and patriotic adjustment of this great problem. Labor is beginning to realize that, if it is to profit permanently by the increases in wages which it has received, it must increase the value and purchasing power of the sum

(Continued on page 34.)

Meat Packers in National Safety Council

The Ninth Annual Safety Congress under the auspices of the National Safety Council was held last week at Milwaukee, Wis., and included a comprehensive exhibition of safety devices and appliances, as well as other exhibits illustrating the value of safety work. Sessions of the Congress were divided into sections, and one of the most interesting of the series was that of the Meat Packers' Section.

These sectional meetings, held on September 29 and 30 and October 1, were largely attended, and a large amount of practical information was derived from them by those present representing packing and tanning concerns. Attendance of latter representatives was so considerable that they were added to the Meat Packers' Section until such time as a separate Tanners' Section may be formed.

Due to various circumstances the vice-chairman, W. W. Pierce, of Morris & Company, St. Louis, Mo., and the secretary, G. L. Mallory, of the Security Casualty Company, of Chicago, were unable to be present. W. J. McClellan, safety inspector of Armour & Company, Chicago, acted as secretary. Committee reports were dispensed with. A nominating committee, composed of Mr. Brown of the Cleveland Provision Company, Mr. Koehler of the National Calfskin Company, and Mr. Batch-

elder of the A. C. Lawrence Leather Company, was appointed.

Methods of Safety Committees.

The first paper, on the subject of "Safety Committees—Value, Organization, Methods Used and Procedure," given by J. M. Eaton of Libby, McNeill & Libby, Chicago, was very ably presented and interestingly discussed. The personnel of the safety committee of this company is quite well standardized, and the discussion was mainly devoted to the rank of the men who should compose the committee. Many persons present gave their experiences of committees composed entirely of workmen, workmen and foremen, and foremen. Because circumstances individually govern conditions, there was no attempt to get an expression of opinion from the men assembled as to which form of committee was preferable.

Mr. Bonsib of the Tanners' Council outlined the hazards of the tanning industry. Some of the hazards he mentioned are peculiar to the packing industry, and much valuable information was obtained by the men present.

A. B. Drummond of Wilson & Company, in his paper on the "Hazards of Conveying Machinery," devoted much attention to comments on the hazards of the operation of freight elevators. A good discussion on the desirable and undesirable features of elevator interlocks and various types of guards for shaftway enclosures resulted.

At this point the chairman mentioned that it was the original intention of the men who formed this session to include the tanners with the packers, but since only a few members of the Council were tanners, the session was started by the meat packers with the hope of bringing the tanners in later. Since there were present a large number of representatives from tanneries, it was the consensus that the tanners should be invited to active participation in the work and meetings of this session, that the section name should be changed to include them, and that this arrangement shall continue until such time as the tanners have membership large enough to merit their establishment as an individual section.

Foremen's Instruction and Other Features.

At the second session on Sept. 30, at 9:30 a. m., W. J. McClellan, safety inspector of Armour & Company, Chicago, read a paper on the "Value of Foremen's Instruction to New Employees." Aside from the benefit of accident reduction accruing from foremen's instruction to new men, considerable benefit has been experienced

(Continued on page 43.)

Teaming and Trucking Problems Solved

The Institute of American Meat Packers has established a new Committee known as the Committee on Local Transportation. The work of this Committee will consist of helping packers solve their teaming, trucking and local delivery problems.

Suggestions as to systems, records and cost data, and replies to questions relating thereto, may be had upon application to the Institute of American Meat Packers, 22 West Monroe St., Chicago, Illinois.

PRACTICAL POINTS FOR THE TRADE

EXPERT ADVICE.

Answer to questions appearing on this page are prepared with the advice and assistance of the Committee on Packinghouse Practice of the Institute of American Meat Packers. This committee comprises W. B. Farris, general superintendent Morris & Company; Myrick D. Harding, general superintendent Armour & Company; Jacob Moog, vice-president Willson & Company; F. J. Gardner, general superintendent Swift & Company; John Robertson, general superintendent Miller & Hart; Arthur Cushman, general superintendent Allied Packers, Inc., and Geo. M. Foster, general superintendent John Morrell & Co., Sioux Falls, S. D.

Readers are invited to submit questions concerning any feature of packinghouse practice on which they desire information or assistance. Criticism or suggestions concerning any matter here discussed are also invited, and will be given careful attention.

RETAINING AMMONIA IN TANKAGE.

An inquiry from a packer in the Northwest is as follows:

Editor, The National Provisioner:

I understand considerable has been accomplished in the line of maintaining a maximum of ammonia in tankage, and would be grateful for any information in this regard.

The Committee on Packinghouse Practice states that the method of retaining ammonia in tankage or blood is a matter of working it up without any loss of time, thereby preventing decomposition, which condition naturally lowers the ammonia content.

In order to obtain the highest ammonia content in tankage and blood it is necessary to keep it absolutely free from manure and material which contains very little nitrogen. This, of course, applies to the product, both blood and tankage, up to and including the time of tanking.

After cooking it should be pressed with-

out any loss of time. This way of handling prevents decomposition. Drying should also be done without any loss of time.

Chemistry as yet, as far as we know, has not been able to add nitrogen to tankage, but it is best to conserve ammonia by handling it more quickly all along the line, thus preventing decomposition.

The same rule holds good in "stick" water and liquid "stick," which is added to tankage by some packers and also used in stock foods. "Stick" water should be kept at a temperature of around 180 deg. or more, in order to keep it sterile.

GREASE AND TANKAGE YIELDS.

A packer in the Middle West writes: Editor The National Provisioner:

We would appreciate the estimated answers to the following questions:

What are the yields from a 200-lb. live weight prime quality hog, as follows: Amount of inedible grease rendered in pounds? Amount of edible grease rendered in pounds? Amount of tankage produced in pounds? Amount of "stick" produced in pounds?

What are the yields from a 1,000-lb. live weight prime steer, as follows: Amount of edible fat (unrendered) in pounds? Amount of inedible tallow (rendered) pounds? Amount of tankage in pounds? Amount of "stick" in pounds?

From a 200-lb hog, live weight, prime quality, we give the following:

Inedible grease, rendered, in pounds: Yellow grease, .60 lb.; white grease, 1.70 lbs.; total, 2.30 lbs.

Edible grease rendered into pounds: P. S. & Leaf rendered, 23 lbs.

Amount tankage produced per 1,000 lbs., live weight: Dry tankage, 11 1-5 lbs.; dry stick, 6 1/4 lbs.; dry blood, 3 1/4 lbs.

From a 1,000-lb. prime steer, live weight, we figure:

Amount of edible fat, unrendered, 41 lbs. Amount of inedible tallow, rendered, avg. of all cattle, 7.59 lbs.

Amount of tankage, avg. of all cattle, 9 lbs.

Amount of "stick" avg. all of cattle, 5.56 lbs.

The above is on the dry basis.

BUTTER AT FOUR MARKETS.

Wholesale prices of 92 score butter at Chicago, New York, Boston and Philadelphia for the week of Sept. 25 to Oct. 1, 1920:

	25.	27.	28.	29.	30.	Oct. 1.
Chicago	59	59 1/2	58 1/2	57 1/2	58	58 1/2
New York	62	62	61	60	60	61
Boston	61	61	61	60 1/2	60	60
Philadelphia	61 1/4	61 1/4	61 1/4	60 1/2	60	60 1/4

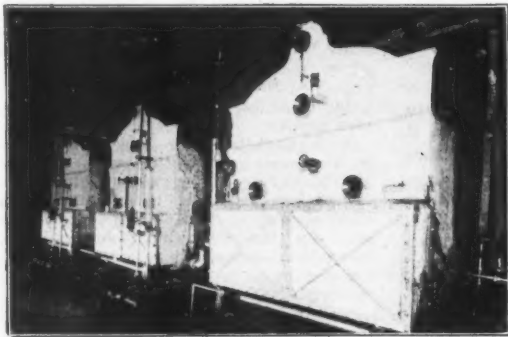
Wholesale prices of carlots, fresh centralized butter, 90 score, at Chicago:

	25.	27.	28.	29.	30.	Oct. 1.
Chicago	54 1/2	54 1/2	54 1/4	54 1/4	55	55
Receipts of butter by cities, tubs:						
This week.	Last week.	Last week.	1920.	1919.		
Chicago	30,444	42,138	24,583	1,964,218	2,175,572	
New York	41,115	35,196	41,310	1,767,447	2,467,470	
Boston	15,849	18,376	10,085	853,385	884,973	
Philadelphia	14,605	11,680	7,640	518,615	539,607	

Total

Cold storage movement, lbs.:

	Into storage.	Out of storage.	On hand Oct. 1.	Cor. day of week, 1919.
Chicago	42,043	108,426	22,184,071	31,263,367
New York	381,892	44,751	22,074,408	27,715,119
Boston	48,021	68,593	17,102,961	16,151,194
Philadelphia	100	54,855	5,016,660	3,476,723
Total	472,956	366,625	66,378,100	78,606,433



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Chicago and New York

Official Organ Institute of American
Meat Packers and the American
Meat Packers' Trade and
Supply Association

Published Weekly by

The Food Trade Publishing Co.

(Incorporated Under the Laws of the State of
New York)

at the Old Colony Building, Chicago.
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OTTO V. SCHRENK, President.

PAUL I. ALDRICH, Vice-President.

HUBERT CILLIS, Secretary and Treasurer.

PAUL I. ALDRICH, Editor and Manager.

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116 Nassau Street, New York.
Telephone Beekman 5477.

Correspondence on all subjects of practical
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except by letter.

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PUBLISHERS' NOTICE.

STATEMENT OF THE OWNERSHIP, MANAGE-
MENT, CIRCULATION, ETC., REQUIRED BY
THE ACT OF CONGRESS OF
AUGUST 24, 1912.

of The National Provisioner, published weekly at
Chicago, Illinois, for Oct. 1, 1920.
State of Illinois, County of Cook. Before me, a
notary public, in and for the state and county aforesaid,
personally appeared Paul I. Aldrich, who, having
been duly sworn according to law, deposes and says
that he is the Vice-President of the Food Trade Pub-
lishing Co., the publishers of The National Provisioner,
and that the following is, to the best of his knowl-
edge and belief, a true statement of the ownership,
management, etc., of the aforesaid publication for the
date shown in the above caption, required by the
Act of August 24, 1912, embodied in section 443,
Postal Laws and Regulations, printed on the reverse
of this form, to wit:

1. That the names and addresses of the publisher,
editor, managing editor, and business manager are:
Publisher, Food Trade Publishing Co., 407 S. Dear-
born St., Chicago, Ill.
Editor, Paul I. Aldrich, 407 S. Dearborn St., Chi-
cago, Ill.

Managing Editor and Business Manager, Paul I.
Aldrich, 407 S. Dearborn St., Chicago, Ill.
2. That the owners are Food Trade Publishing
Co., 407 S. Dearborn St., Chicago, Ill.; Estate of
J. H. Sennet, 116 Nassau St., New York, N. Y.;
Estate of Julius A. May, 116 Nassau St., New York,
N. Y.; Estate of Geo. L. McCarthy, 116 Nassau St.,
New York, N. Y.; Hubert Cillis, 116 Nassau St.,
New York, N. Y.; Paul I. Aldrich, 407 S. Dearborn
St., Chicago, Ill.

3. That the known bondholders, mortgagees, and
other security holders owning or holding 1 per cent
or more of total amount of bonds, mortgages, or
other securities are: There are none.

4. That the two paragraphs next above, giving
the names of the owners, stockholders, and security
holders, if any, contain not only the list of stock-
holders and security holders as they appear upon
the books of the company, but also, in cases where
the stockholder or security holder appears upon the
books of the company as trustee or in any other
fiduciary relation, the name of the person or cor-
poration for whom such trustee is acting, is given;
also that the said two paragraphs contain statements
embracing affiant's full knowledge and belief as to
the circumstances and condition under which stock-
holders and security holders who do not appear upon
the books of the company as trustees, hold stock and
securities in a capacity other than that of a bona
fide owner; and this affiant has no reason to believe
that any other person, association, or corporation
has any interest direct or indirect in the said stock,
bonds, or other securities than as so stated by him.

PAUL I. ALDRICH,

Vice-President.

Sworn to and subscribed before me this 29th day
of September, 1920.

LILLIAN M. DONAT,
Notary Public.

(My commission expires Jan. 24, 1924.)

REFRIGERATOR CAR SUPPLY

Since 1887 the federal law has made it
unlawful for any common carrier to give
any undue or unreasonable preference or
advantage to "any particular person, com-
pany, firm, corporation, or locality, or any
particular description of traffic, in any re-
spect whatsoever, or to subject any par-
ticular person, company, firm, corporation,
or locality, or any particular description
of traffic, to any undue or unreasonable
prejudice or disadvantage in any respect
whatsoever."

For many years this provision of the law
was treated as a "mere scrap of paper,"
and many a concern found it was unable
to get cars while its more favored com-
petitor was fully supplied. This condition
continued until "teeth" were written into
the law, and with the awards of reparation
against carriers guilty of these tactics
they soon found it expedient to treat ship-
pers alike, and so avoid further difficulties.

For some reason not yet made clear the
car service section of the American Rail-
road Association recently attempted to dis-
regard the above-quoted section of the law,
and by so doing unduly discriminated
against the packing industry. That their
plan was only partially successful was due
to the activity of the Institute of Ameri-
can Meat Packers in immediately appeal-
ing to Washington for relief from the in-
tolerable ruling.

In this ruling the refrigerator car sec-
tion of the American Railroad Association
arbitrarily decreed

1—That packers owning cars would
receive no railroad refrigerator cars, and

2—Small packers with no cars of their
own could get no railroad cars until fruit
shippers had been taken care of.

The situation became so acute before re-
lief was granted that several packers tem-
porarily suspended killing, and practically
all packers restricted their operations.
Meanwhile, hundreds of empty refrigerator
cars were being rushed to the fruit dis-
tricts to take care of that traffic.

The Institute made it clear that in cases
of car shortage they merely desired an
even break with other shippers; but that
they did not purpose bearing the whole
burden of loss. Their position was sus-
tained by the Interstate Commerce Com-
mission, and orders were issued to see
that shippers of all commodities handled
in refrigerator cars shared alike in the
limited supply of cars available for load-
ing.

The Traffic Committee of the Institute
had been informed by the manager of the
department responsible for this discrimi-
nating order that he would not give them
a single car until the fruit shippers had
been supplied and that arguments were

useless. The Committee immediately ap-
pealed from his decision, with the results
stated. As further proof of the lack of a
spirit of co-operation, it is said that al-
though every shipping packer was "short"
on cars, many of the cars owned by pack-
ers were loaned to other packers, although
such an act only further hampered the car
owner.

It is hard to believe that there was any
deliberate intention on the part of railroad
officials to discriminate against meat
packers, yet this looks very much like it.
It is gratifying to find that every meat
packer has a champion in the Institute,
and that the authorities at Washington
were prompt to recognize and remedy the
wrong.

PREVENT FIRE AND ACCIDENT

Today, October 9th, the anniversary of
the great Chicago fire of 1871, has been
designated as "Fire and Accident Pre-
vention Day."

Fire and Accident Prevention Day is an
important factor in the campaign for the
conservation of the national resources by
reducing the preventable fire waste of the
country and the terrible toll of life and ac-
cidents.

It is specially important this year, in
view of the national campaign for the
conservation of foodstuffs and manufac-
tured resources to reduce the high cost of
living, and the necessity of maintaining
the earning power and production of the
country.

The fire losses in the United States and
Canada in 1920 were \$269,000,775. So far
this year they are more than \$40,000,000
ahead of the same period last year. The
state fire marshals and fire prevention au-
thorities generally agree that 75 per cent
of these fires are due to preventable
causes, and could easily be avoided by the
exercise of reasonable precaution, individ-
ual and municipal.

The loss in earning power due to pre-
ventable accidents is over two billion dol-
lars a year.

Over 15,000 are killed and 50,000 injured
annually as a result of fire.

The fire losses and the cost of fire pre-
vention in the United States amount to
annually \$700,000,000.

The annual per capita fire waste in the
United States is \$2.50; in Europe, 33 cents.
Reason: the latter has better construction,
less carelessness and increased responsi-
bility.

An ounce of fire prevention is worth a
pound of fire extinguishment. The way
to get lower insurance rates is to have
fewer fires.

TRADE GLEANINGS

The Co-operative Packing Company of Indiana will build a plant at Delphi, Ind.

The Sumter Fertilizer Company, Sumter, S. C., has increased its capital from \$50,000 to \$100,000.

The DeWitt Rendering Plant, DeWitt, Ia., has been sold to M. R. Wilkins and W. E. Schwerdtfeger.

The Martin Cotton Oil Company has been incorporated at Greenville, S. C., with a capital of \$100,000.

Plans are being made for the organization of a farmers' co-operative packing plant at Moberly, Mo.

The International Vegetable Oil Company, a \$2,000,000 concern, has been incorporated at Atlanta, Ga.

The A. W. Higgins Fertilizer Company has been incorporated at Deerfield, Mass., with a capital of \$100,000.

The MacMurphy Fertilizer Company, Charleston, S. C., has increased its capital stock from \$100,000 to \$300,000.

The Southern States Packing Company will establish a packing plant and a by-products factory at Savannah, Ga.

The Saunders Lone Star Seed & Gin Company, Greenville, Tex., has increased its capital from \$40,000 to \$60,000.

The Rogers Company of Tacoma, Wash., contemplates the construction of a peanut oil mill in connection with its factory.

The plant of the Faulkner-Burge Packing

Company, Marion, Ind., was recently destroyed by fire, the loss aggregating \$50,000.

The New Boston Cotton Oil Company has been incorporated at New Boston, Tex., with a capital of \$40,000. The incorporators are James Hubbard, J. H. Simms and W. S. Tyson.

E. C. Gerety has retired as head of the Hoosier Casing Co., Inc., of Indianapolis, Ind., and will be connected with the organization of a new casing enterprise in the Middle West. Mr. Gerety established the casing department of one of the big packers and has long been identified with the trade.

Announcement has been made of the consolidation of two of the leading packing concerns of Baltimore, Md., the Wm. Schluderberg & Son Co. and the Thos. J. Kurdle Co. The new company will be known as the Wm. Schuldberg-T. J. Kurdle Company, and will shortly occupy its new plant now nearing completion, which is said to be one of the most up-to-date in the country.

REFRIGERATOR CAR SHORTAGE.

Packers are informed that the Commission on Car Service of the American Railroad Association has served notice on all superintendents and agents throughout the country that the shortage of refrigerator cars demands that the most drastic action be taken to secure release of loaded cars in minimum time. Effective Thursday, September 23, those having shipments held in excess of five days will have embargo placed against further business for their account until they make satisfactory arrangements to dispose of their shipments promptly.

Secretary C. B. Heinemann of the Institute of American Meat Packers warns

members to see to it that equipment is promptly unloaded and released, and where conditions beyond their control make this impossible, the railroad agent should be immediately notified, so that he will have no cause for imposing embargoes such as have been threatened.

PARCHMENT PAPER WRAPPINGS.

The use of printed parchment paper in wrapping fresh meats has been decided to be contrary to the federal net weight law, but the Bureau of Animal Industry has granted an extension of time to permit packers who have had a considerable supply of the paper on hand to continue its use until an agreed date. Secretary C. B. Heinemann of the Institute of American Meat Packers suggests to members experiencing trouble in this respect that they take the matter up immediately with the Institute in an effort to get such an extension of time as will enable them to dispose of their supply of paper now on hand.

FRESH MEAT CLAIMS.

Freight claim agents of the various railroads have been advised by the regional counsel that all fresh meat claims on hand will be taken up and disposed of as rapidly as possible. The merits of each claim will be considered individually and they will be handled on the basis which seems most proper to the counsel.

Packers who experience any difficulty with respect to any particular railroad are advised by the Institute of American Meat Packers to call its claim agent's attention to this statement of the regional counsel. All claims which have been held up pending investigation may now proceed without further delay.

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MEAT PACKERS

CORRESPONDENCE SOLICITED

PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces, pork and beef by the barrel or tierce and hogs by the hundredweight.

Prices Very Irregular—Some Low Levels
Pork Under Pressure—Lard and Ribs
Steadier—Stocks Decreased.

The future market has been very weak, declining to new low levels on most deliveries, and rallies from the declines have not been active. In the past few days pork has declined \$2.00 a bbl., lard 1c a pound and ribs 1c to nearly 2c a lb. The hog market has been weak and has reflected the decline in grain and in products.

The decline in the market has simply been a case of readjustment of values, which has been going on in all other commodities and has had a distinct influence. The very fact that wheat, corn, oats and other grain have shown such declines, that cotton, sugar and many other commodities have broken from 50 to 75 per cent from the war high has been a feature in the product market and helped to bring about a general readjustment of values in all grains, and in provisions and hogs.

It has been recognized that hogs could not sell at the recent high prices with corn under \$1 a bu. The price of hogs has been weak this week, and the average has declined to around \$15, compared with the recent average of nearly \$17. The action of the hog market in the past two weeks compared with previous years follows:

	Hogs.	Cattle.	Sheep.	Lambs.
Last week	\$15.90	\$14.50	\$ 6.20	\$13.00
Previous week	16.70	14.85	6.00	13.10
Cor. week, 1919.....	15.75	16.00	8.10	15.40
Cor. week, 1918.....	18.95	15.00	11.00	15.25
Cor. week, 1917.....	18.90	12.30	11.90	18.00
Cor. week, 1916.....	9.45	9.65	7.40	9.90
Cor. week, 1915.....	8.00	9.20	5.80	8.85
Cor. week, 1914.....	7.90	9.10	5.20	7.50
Cor. week, 1913.....	8.25	8.35	4.65	7.05
Cor. week, 1912.....	9.07	8.05	3.85	6.45
Cor. week, 1911.....	6.48	6.95	3.80	6.00

Av. 1911 to 1919...\$11.40 \$10.50 \$ 6.85 \$10.50

The price of cash corn has been around 90c to 95c of late and with hogs at over \$15 there has been an apparent profit in feeding operations equal to over 50c a bu. in corn. Such a profit as this is beyond reason, and it has been one of the factors which has caused selling of product, but product has not declined in keeping with the decline in corn. The trade, however, realized that a record crop of corn has been matured, that the season is still open

and fine and with the large crops of other feed-stuffs the feeding situation will be unusually good.

The movement of hogs continues fairly liberal. The receipts at the leading points last week were nearly up to the corresponding level of last year. The receipts of cattle and sheep, however, show a considerable decrease. Stocks of product show a good decrease during the past month, and the total at the leading points both in lard and ribs and the decrease in all product stocks is very liberal. This shows that the domestic distribution is increasing, as the exports are still disappointingly light. The exports the past week of meats were only about 16,000,000 lbs. and lard 12,000,000 lbs. These figures are a little better than last year, but show a falling off in meats compared with the preceding week.

The details of the provision stocks at the leading points, Chicago, Milwaukee, Kansas City, St. Louis, So. Omaha and St. Joseph for October 1st, compared with the previous month and previous year, follow:

	Oct. 1, 1920.	Sept. 1, 1920.	Oct. 1, 1919.
Mess pork, bris....	16,988	21,480	3,583
Other pork, bris....	45,435	43,000	47,914
P. S. lard, lbs....	64,999,233	96,027,456	20,041,867
Other lard, lbs....	10,370,085	16,902,116	19,629,643
S. P. hams, lbs....	55,376,770	66,582,858	55,534,754
S. P. sk'd hams lbs.	27,108,754	29,235,853	32,120,003
S. P. picnic, lbs.	13,929,824	21,970,599	23,679,269
S. P. bellies, lbs.	23,333,911	26,892,218	17,178,135
S. P. shoulders, lbs.	345,158	346,782	1,489,153
D. S. shoulders, lbs.	6,425,558	6,929,558	5,793,338
Short rib sides, lbs.	8,460,987	13,362,342	6,878,801
Ex. S. R. sides, lbs.	1,503,882	1,754,920	2,067,068
Sh. clear sides, lbs.	1,540,687	4,379,087	15,480,500
Ex. S. cl. sides, lbs.	6,371,095	9,832,546	4,582,570
D. S. bellies, lbs.	38,396,272	51,739,842	59,102,532
Sh. fat backs, lbs.	10,489,678	15,487,780	10,935,110
Other meats, lbs.	54,833,828	67,565,950	62,489,460
Total meats, lbs.	246,096,504	313,544,360	297,951,337

The problem before packing interests and provision dealers is a very serious one. The trade has gone through the summer with prices showing a relatively downward tendency, and with the movement of other commodities towards a normal basis there has been the break to new low levels on product within the past two days. Stocks are heavy and on that account the losses have been quite important, as there is probably very little in the way of meat stocks which shows a profit to holders on the basis of present quotations. Some of

it may have been made from a lower level of hogs, but if it was made out of hogs during the past two months there is no profit in the business.

The situation of hogs compared with feed values is not encouraging for the maintenance of hog prices. There would seem to be two ways for the situation to develop, either a decline in the price of hogs or an advance in the price of corn, or perhaps some of both. With the supply of hogs in the country less than last year, there will be a better basis for the claim that hogs will decline relatively less than the price of corn will advance.

As to the export situation, that may or may not improve. It is believed that it will be moderate for the next few months at least, and may not improve in a large way until product prices bear a more normal relation. It would seem as though it would be very difficult to sell products on the basis of 15c hogs or better when the other side can buy its feed grains on a basis such as has been seen recently.

PORK—The market has been quiet, but very firm, due to persistent advices from western packers of quite liberal export sales. Domestic demand is rather quiet. At New York mess was quoted at \$30@31, family, \$48@53 and short clears \$39@43. At Chicago mess was quotable at about \$24.

LARD—The market was more active and was considerably stronger, the cash gained on the options in the west. This was due to a much improved foreign demand, the west claiming export sales of 3,500,000 pounds the past week, a good part of which went to Germany. At New York Prime Western was quoted at \$20.60@20.70, Middle Western \$20.25@20.35, New York City, 19½@19¾c, refined to the continent 23c, South American 16¾c, Brazil kegs 24¼c and compound 16@17c, according to quantity and brand. At Chicago loose lard was about 10c over October, and leaf lard 22½@23¼c.

BEEF—The market continues very quiet but firm. At New York mess was quoted at \$19@20, Packet \$21@22, Family \$25@28 and Extra India Mess \$42@45.

SEE PAGE 31 FOR LATER MARKETS.

Automatically Perfect Ham Cooking

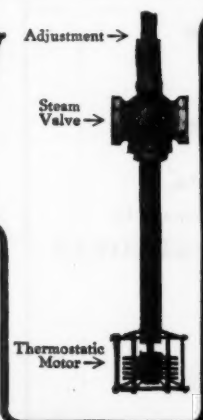
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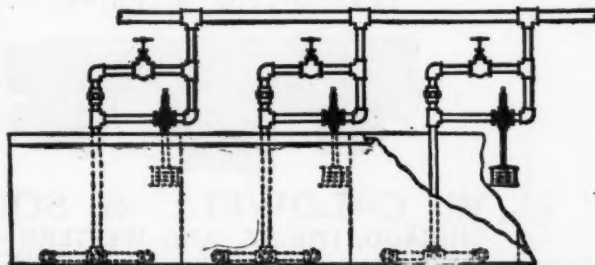
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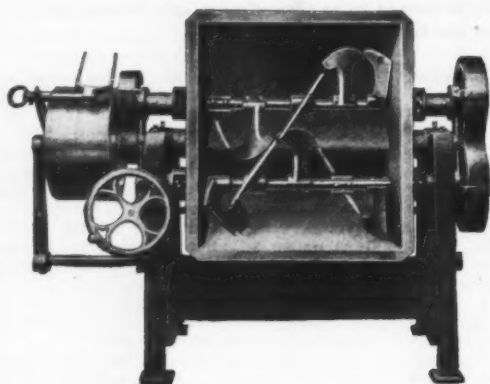
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GREEN AND SWEET PICKLED MEATS. (Special Letter to The National Provisioner from the Davidson Commission Co.)

Chicago, Oct. 6.—Quotations on green and sweet pickled meats, f. o. b. Chicago, loose, are as follows:

Regular Hams—Green, 8@10 avg., 26c; 10@12 avg., 26c; 12@14 avg., 26c; 14@16 avg., 26c; 16@18 avg., 26c; 18@20 avg., 26c. Sweet pickled, 8@10 avg., 27½c; 10@12 avg., 27½c; 12@14 avg., 28c; 14@16 avg., 28c; 16@18 avg., 28@29c; 18@20 avg., 28½@29½c.

Skinned Hams—Green, 14@16 avg., 28½c; 16@18 avg., 28½c; 18@20 avg., 28½c; 20@22 avg., 28c; 22@24 avg., 27½c. Sweet pickled, 14@16 avg., 30c; 16@18 avg., 30c; 18@20 avg., 30c; 20@22 avg., 29½c; 22@24 avg., 29c.

Picnic Hams—Green, 4@6 avg., 19½c; 6@8 avg., 19½c; 8@10 avg., 18½c; 10@12 avg., 18c. Sweet pickled, 4@6 avg., 19½c; 6@8 avg., 19½c; 8@10 avg., 18½c; 10@12 avg., 18c.

Clear Bellies—Green, 6@8 avg., 29c; 8@10 avg., 28c; 10@12 avg., 27c; 12@14 avg., 26c; 14@16 avg., 25c. Sweet pickled, 6@8 avg., 29c; 8@10 avg., 28c; 10@12 avg., 27c; 12@14 avg., 26c; 14@16 avg., 25c.

PORK CUTS AT NEW YORK.

(Special Report to The National Provisioner from H. C. Zaun.)

New York, Oct. 6, 1920.—Wholesale prices on green and sweet pickled pork cuts in New York City are reported as follows: Pork loins, 44@48c; green hams, 8@10 lbs., 30c; 10 @ 12 lbs., 30c; 12@14 lbs., 29c; green clear bellies, 8@10 lbs., 31c; 10@12 lbs., 31c; 12@14 lbs., 30c; green rib bellies, 10@12 lbs., 28c; 12@14 lbs., 28c; sweet pickled clear bellies, 6@8 lbs., 27c; 8@10 lbs., 27c; 10@12 lbs., 26c; 12@14 lbs., 25½c; sweet pickled rib bellies, 10@12 lbs., 25½c; 12@14 lbs., 25c; sweet pickled hams, 8@10 lbs., 31c; 10@12 lbs., 30c; 12@14 lbs., 29c; dressed hogs, 25½c; city steam lard, nominal, 19c; compound, 17c.

Western prices on green cuts are as follows: Pork loins, 8@10 lbs., 42c; 10@12 lbs., 41c; 12@14 lbs., 40c; 14@16 lbs., 38c; skinned shoulders, 24c; boneless butts, 38c; Boston butts, 31c; lean trimmings, 23c; regular trimmings, 19c; spareribs, 17c; neck ribs, 4c; kidneys, 5c; tails, 11c; livers, 2c; pig tongues, 22c.

EXPORTS OF PROVISIONS

Exports of provisions from the Atlantic and Gulf ports for the week ending Oct. 2, 1920, with comparisons.

	Week ended Oct. 2, 1920.	Week ended Oct. 4, 1919.	From Nov. 1, 1919, to Oct. 2, 1920.
United Kingdom	110	1,947	15,530
Continental			2,240
So. and Cent. America			79
West Indies			560
B. N. A. Colonies			865
Other Countries			3,194
Total	110	3,506	40,406

BACON AND HAMS, LBS.

United Kingdom	12,205,000	2,722,200	542,048,700
Continent	7,277,200	9,160,800	382,541,713
So. and Cent. America		72,864	1,839,925
West Indies		641,581	13,442,964
B. N. A. Colonies		30,006	827,248
Other Countries		107,489	816,115
Total	19,572,200	12,735,030	941,316,665

LARD, LBS.

United Kingdom	6,646,584	3,693,500	244,097,672
Continent	11,331,952	1,694,800	327,360,189
So. and Cent. America		45,320	4,631,988
West Indies		683,626	15,198,043
B. N. A. Colonies		137,198	787,828
Other Countries		40,285	1,824,547
Total	17,978,536	6,204,729	593,900,267

RECAPITULATION OF THE WEEK'S EXPORTS.

From—	Pork, bbls.	Bacon and hams, lbs.	Lard, lbs.
New York	110	5,277,200	10,515,536
Boston		4,752,000	5,254,000
Philadelphia		1,065,000	28,000
Baltimore		531,000	
Montreal		7,947,000	2,181,000

Total week	110	19,572,200	17,978,536
Previous week	410	21,160,200	9,781,570
Two weeks ago	738	9,793,500	11,105,504
Cor. week 1919	3,506	12,735,030	6,205,729

Comparative summary of aggregate exports in lbs. from November 1, 1919, to Oct. 2, 1920.

	1919, to 1920.	1918, to 1919.	Decrease.
Pork	9,881,200	12,415,200	2,534,000
Bacon and hams	941,316,665	1,820,311,317	884,964,652
Lard	793,900,267	702,738,952	108,838,685

TALLOW, STEARINE, GREASE AND SOAP

WEEKLY REVIEW

TALLOW.—The market showed more activity the past week with the undertone heavy and new low levels for the season reached with sales reported of 200 drums of City special loose at 9½c. This price showed a decline of ¼c per pound from the previous sale. The buying was reported to have been by a local soap manufacturer. Offerings appeared somewhat larger due possibly to the weakness in cotton oil and the weaker tone in greases together with a slow foreign demand and the declining tendency in practically every commodity due to a general belief that price readjustment has finally set in. At New York prime city was quoted at 9c nominal, special loose 9½c sales and edible 14@15c nominal. At Chicago packers' No. 1 was quoted at 11½@12c and edible at 14½@15c.

OLEO STEARINE.—The market was very quiet the past week and although no important transactions were reported the undertone was easier due partly to a further decline in tallow and unsteadiness in the grease situation. At New York oleo was quoted at 16c nominal and at Chicago at 15½@16c.

OLEO OIL.—The market was very quiet and nominally unchanged from a week ago, but demand is quiet and indications point to a lower tendency. At New York extra was quoted at 21½c and at Chicago at 20½@21c.

SEE PAGE 31 FOR LATER MARKETS.

NEATSFOOT OIL.—Only a moderate trade is passing but the market is steady with price changes unimportant. Pure refined is quoted at \$1.42 a gallon, extra No. 1 at \$1.22, No. 1 at \$1.17 and prime at \$1.20.

LARD OIL.—The market the past week was easier, prices declining slightly from the levels prevailing the past few weeks. Demand is rather quiet and offerings were a shade larger. Prime winter was quoted at \$1.75@1.80 per gallons, extra No. 1 at \$1.22, No. 1 at \$1.17 and No. 2 at \$1.15.

GREASES.—The market has been quiet. A good demand exists for high grade greases, which are in poor supply while the low grades are not in demand. The undertone has been weak due to the action in cotton oil and tallow, but the trade was impressed somewhat by the big reduction in lard stocks that took place within the last month or so. At New York yellow was quoted at 7¼@8c, choice house 7¼@8c, and white 10@13½ according to quality. At Chicago brown was quoted at 8½@9c yellow, 9¼@10c and house 9@9¼.

ESSENTIALS IN MEAT PACKING.

(Continued from page 18.)

the best formulas to use in the curing of meats.

The function of sugar in the curing of meat is not alone to sweeten. While this is an important function, offsetting the brackishness or saltiness which result from the use of salt, it also plays an important function in connection with the fermentation process, and supplies food for certain types of bacteria which would have a tendency to get into the meat if the sugar was not present. In other words, sugar acts as a protective against objectionable bacterial action, also in all probability it prevent the fermentation of the natural sugars of the meat.

In that connection it is important, in dealing with some of these new sugars which are being offered to you for use, some of the so-called scientific sugars, to be sure those sugars are fermentable, because you want those sugars for curing.

Value of Research Work.

The Bureau of Animal Industry has done

some valuable work in connection with ham souring, and it is available for your information, and I might say that this is one of the most important and useful functions of the Bureau of Animal Industry. Undoubtedly there has been a lot of very valuable scientific work carried on in the laboratories of the large packinghouses, and also in some of the smaller ones, but unfortunately this has been stored away and not made available for everybody. Perhaps this should be changed, and work of this type published for the general good.

I said to Mr. Harding, a few months ago, that I particularly wanted to congratulate him in connection with the paper he read before the Institute of Independent Margarine Manufacturers. He started something which is very important. He started to tell the public about some of the progressive work which had been going on in that direction. He was not afraid to come out in the open and tell us about it. I am going to borrow some of that work, because it looks good to me. Gentlemen, I thank you. (Applause.)

Value of the Committee Work.

CHAIRMAN FARRIS: Dr. Lowenstein mentioned what Mr. Harding had done, and what it means. He stated Mr. Harding had started something and he was going to borrow from him. Now, that is what we have this Committee for. We are willing to lend you everything he has, and in addition to that we will tell you how to do it, and how to handle it. And I hope from now on, whether this Committee is in existence the coming year or whether it is some other committee, that the members that used to come to that Committee will come to it with more of their problems. It is educational. It helps us as well as it helps these operators, and it is our aim, if we can, to put this Committee on the same basis as the Standardized Accounting Committee is on, that is, we hope to be able to get a product that is turned out of the packinghouse as uniform in manufacturing, handling and so forth, as we expect to get the costs in time. It is a big job, but we hope it will come.

I would like to have an expression from some of the members here today. We have not heard anything as to what our Com-

mittee is doing. We do not even know whether the members are satisfied with it or not. We feel that we are putting forth our best efforts, but sometimes a man thinks he is doing good, and in reality he is not doing very much at all.

We have Mr. Taliaferro of Detroit with us today. You no doubt have been following up some of our work, and we think you could give us your opinion as to how we are handling it.

Praises Practical Work Done.

MR. T. W. TALIAFERRO: I want to say that of all the committees we have this is a pet committee. This is one that has done us a distinct good. I have taken occasion once or twice to write to the committee and encourage them and tell them what good they are doing. They have opened a door to the small packer that has been closed to him in the past, because the smaller packer has not the facility, and he cannot go to the expense that the larger packers have been able to do. They have come to us and told us now that we can get help. All that they have got they are glad to give to us. "Come to us with your troubles and we will help you out," they say.

I think that this committee is worth many times over the cost to any packer of membership in the Institute. If he does not get any other good out of it, coming in from other committees, he can get good from this committee, and it will be the one committee to help establish the business.

In time, in my estimation, this will lead us all to a real manufacturing business. We feel our business has been speculative. It has gotten down to a point where we have got to have a system of cost manufacturing and accounting, and of all of those, in my estimation, the system of figuring costs as started and fathered by this committee will be the greatest thing in the Institute. I thank you, gentlemen.

CHAIRMAN FARRIS: We all know there is no packinghouse man in the country better versed to speak on conservation, or any other packinghouse question, than Mr. Harding. I think he is one of the superintendents who has made more of a study of conservation than probably any

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other man in the business. I know if I want any information on conservation I go to Harding, and I am always sure to get it.

Conservation a Vital Subject.

MR. M. D. HARDING: Mr. Chairman, members of the Packinghouse Practice Committee, and gentlemen: This committee is only in its infancy. During the first year of the Institute and the first year of our committee, we merely laid the ground work for working things that are to be done.

The committee selected by President Wilson, of which Mr. Farris is chairman, has been made up principally of men who have spent their entire lives in the packing industry. I had occasion during the presentation of the 25-year badges to figure up the average length of service of the six members of our committee, and I found they averaged 29 years in the industry. So it is safe for me to say that the six members of our committee, selected from the various packers, large and small, are in a position, when they meet generally, to consider any subject that might be put up to them.

The vital subject now, and the vital subject in the days to come in our industry, will be the question of conservation. Conservation in labor, conservation in supplies, conservation in materials, conservation in machinery and products.

Along that line we established a program of work that called for an introductory statement to be published in THE NATIONAL PROVISIONER, and followed up with separate articles on various subjects. I will take occasion right here, for the benefit of those who have not had opportunity of reading the opening paper, which has already been published, to read it and to give a list of the series of articles that we are going to write upon.

(Mr. Harding then read his paper on methods for conserving edible and inedible products.)

METHODS FOR CONSERVING EDIBLE AND INEDIBLE PRODUCTS.

By Myrick D. Harding, Gen. Supt., Armour & Company, Chicago.

This question is one covering a wide field in the modern packinghouses, and is one in which the owners of the plants are vitally interested. It oftentimes spells the difference between success and failure. Whenever a packinghouse conserves its waste products, and gets full yields of the by-products from the carcass, it is a certainty that the plant is well managed.

Unfortunately, however, the greater portion of American packinghouses have not given this question the attention it deserves.

The chief waste in our industry lies in the failure to get the best use out of all materials. This industry has grown so rapidly that we have given most of our attention to volume and tonnage, and have been inclined to lose sight of the essential details.

It is a well-known fact that much food yearly goes into inedible products that should go into other channels, and is lost through neglect, indifference and carelessness. Many pounds of good, clean fat for edible food products are permitted to mix with inedible matter of contaminated nature, and finds its way into inedible tanks. Lean meats that should be used in sausage or in the can are left on primal cuts, going into both edible and inedible rendering tanks, and produces tankage instead of food.

Waste of Fat and Trimmings.

During the war the necessity for economy led to some very radical changes in the dressing of sheep. Instead of following the old practice of leaving the caul on the carcass we now dress the sheep with round or hog dressing and hold the fat at the point of origin, rendering it into oleo oil, instead of letting it go on the carcass to the branch house, becoming waste product and being sold to the local fat renderer for inedible product.

The wasteful trimming of primal cuts is a point that has never been given the proper consideration in the industry. The lack of proper inspection at the top of the tanks. The lack of proper checking of the products on primal parts, such as hearts, livers, cheek meat, brains, etc., in order to insure that none of the products are neglected.

Importance of the Tank House.

The necessity of separating the tank water for skimming; the proper check on the products which produce tankage, slime and by-products of this kind, has never been given the consideration due same. It can be truthfully stated that the tank house is a department in the packinghouse that is universally neglected, yet this department is one in which a great loss can be occasioned by indifference, by lack of proper knowledge and supervision.

When the American meat packer begins to realize how much money he can lose through improper handling at the tank house, he will commence to make money. But so long as this department is neglected, as it is in many plants today, there will always be a small margin of profit in the business. It has been well said that there are four ways in which products can leave the plant—by team, by car, through the sewers and through the tank room.

It is the intention of the committee to take up the subject of conservation and waste in the series of articles that will be written in succession, covering the proper method of handling some of the points in the packing industry that are not now receiving the attention they deserve. A partial list of these items is given herewith:

Some Subjects to Be Taken Up.

1st—The full production of meat product, such as hearts, livers, cheek meat, brains, tails, etc.

2nd—The recovery of edible fats from cattle sheep and hogs at the time of slaughter.

3rd—The recovery of fats for oleo products.

4th—The recovery of inedible fats for high-grade tallows.

5th—The recovery of fats from waste water for low-grade tallows.

6th—The prevention of waste from leaving the premises in waste water.

7th—The recovery of organic matter from waste water.

8th—The full production of blood from the carcass.

9th—The full production of tankage from the carcass.

10th—The full production of liquid "stick."

11th—The recovery of casing slime and the disposition of same.

12th—The recovery of grease from liquid "stick."

13th—The recovery of skimming fats into the various grades of tallows and greases.

14th—The loss of ammoniates in tankage by reason of decomposition.

15th—The amount of hide left on the feet and heads.

16th—The loss due to improper take-off on cut hides.

17th—The improper method of handling hide packs, and the consequent loss in shrinkage.

18th—The saving of waste water for liquid "stick" from the cooking of blood.

19th—The saving of waste water for liquid "stick" from the cooking of pigs' feet, tripe, etc.

20th—The cooking shrinkages on sausage, boiled hams, etc., due to lack of knowledge of the critical internal temperature at which meat products are cooked.

21st—The saving of marrow from the beef killing and cutting bones.

22nd—The amount of meat left on the cut bones at the time of boning.

It is our intention to issue an article on each of these items mentioned, furnishing whatever information we may have at hand concerning the proper method of con-

serving products, as outlined in each of the items mentioned above.

Full Production of Meat Products.

In all the modern slaughter houses the practical packer and superintendent fully realize what it means to get full yields of their by-products, but frequently do not provide the proper check method in order to know definitely each day that full production of all parts has been obtained.

A careful count should be made of all tails, hearts and items of such nature; careful weights should be taken on the production of cheek meats, brains and items of this kind. At the end of each day the cooler men should check up their receipts against the number of head of cattle, sheep and hogs slaughtered, and balance out this production the same as a bank cashier balances his cash, checking in only the pieces saved by making certain that the full production for each head is obtained.

It has not been a great many years ago when the beef hide and the fat were the only by-products saved, but in later years there has been a demand developed for the meats—productions that were formerly wasted. This has been brought about by reason of campaigning so that the consuming public learned of the value of these items as food products.

Value of These By-Products Realized.

The method of producing, chilling, and attractive method of packing a neat, attractive-looking package has had considerable to do with the ever-increasing demand for these meat products. The values of these meat products has long been understood by the people of foreign countries, but beef, sheep and pork have been so plentiful in this country in the past that there did not appear to be the same necessity for consuming the meat products on this side as existed in the foreign countries.

Today the average American family is educated to the true value of these meat products, and the situation that formerly existed where the housewife who purchased these meat products was considered stingy or poor, has been completely eliminated.

The development of the freezer as an adjunct to the packing business has made it possible to accumulate these products during the heavy slaughtering season for distribution during the season when the slaughtering is light, and, therefore, during the present years it is considered not only an economical loss but also a waste to put hog snouts, livers, ears, tails, cattle cheek meats, or any of these meat products from slaughtered carcasses in the rendering tank.

The modern packer guards against any of these products going into the tank as he guards against any product going into the sewer. It is therefore necessary for every packer, large or small, to look well into his system of saving full production of these meat products, and likewise his system of daily balancing out his productions of each item against the kill.

THE CHAIRMAN: I want to say on behalf of the committee and myself we are pleased to have you with us, and want to thank you for being here.

(On motion, the luncheon adjourned.)

ARGENTINE EXCHANGE RATE.

American business men in Argentina say that the unfavorable exchange rate between that country and the United States has seriously endangered American business there. Prices of American products were recently raised about 15 per cent by a sudden fall in Argentine money. Many firms have refused to accept drafts and the custom houses are filled with products from the United States, left there for the accounts of shippers.

VEGETABLE OILS

WEEKLY REVIEW

THE NATIONAL PROVISIONER is Official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association and the Mississippi Cottonseed Crushers' Association.

Markets Weaker—Demand Slow—Crude Oil Heavy—Lard Strong.

The main developments in the vegetable oil markets the past week again took place in cottonseed oil on the New York Produce Exchange, where operations were on a fair scale and the market was rather weak. During the fore part of the week prices declined about a half cent a pound under heavy commission house selling by interests with Southern, Western and Wall Street connections, on hedge pressure against crude oil purchases, and under selling brought about by the big declines in other commodities under what was generally termed as war-price readjustment. The developments, within the situation itself and without, were largely of a character that would make for lower levels, and support was very limited until the market reached a level of about 12½c for the new crop options, when a better class of buying developed, and a fair-sized rally took place.

During the past week holders of crude oil in the South appeared to have lost confidence, and sold in a fair way—in fact, in a heavier way than at any time this season, and at lower prices. In the Southeast the market sold down to the nine-cent level, while sales were recorded at 8¾c in Louisiana and Mississippi, and rumors were current of sales at 8¾c in Texas. Bleachable oil was reported offered from

Texas, f. o. b. tank cars, at 10½c. The willingness of the South to sell crude oil at the lower levels was undoubtedly due to the Government's cotton crop condition estimate of 89.1% as of Sept. 25th, which indicated a crop of slightly more than twelve million bales. At times unconfirmed reports were current that some large interests were re-selling crude oil, but very little confidence was placed in the rumors. With crude oil at 9c, the new crop options at 12½c or better furnished a full hedging basis, and quite a little selling took place in the market for some of the leading refining interests.

The lard market was somewhat stronger, advancing on reports of quite liberal export sales to various European countries, including Germany, and due somewhat to the big decrease in the Chicago lard stocks the past month, and the reports that the stocks of lard at the leading Western centers had decreased some 67,000,000 lbs. during September. This strength, however, was about the only bright spot in the grease situation, as tallow dropped ¼c per lb. to the lowest levels of the season, with sales of special loose reported at 9¾c. Greases were weaker, and the other oils, as well as oleo-stearine, were unsteady.

The strength in lard was sufficient to stay the decline in cotton oil and bring about a fair rally on Wednesday, under heavy Western short covering and some fresh buying thought to have been for Western packers. Liverpool longs were reported supporting the market, and quite

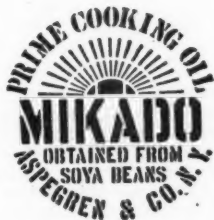
liberal buying orders were reported at slightly below the 12½c level for December and January. Sentiment became more mixed, and there was a good deal of covering on the belief that a natural rally was in order, but the majority of opinions continued to lean towards the anticipation of still lower levels, and a good many were suggesting sales on the bulges. The average trader is operating on the basis of supply-and-demand, and many shrewd interests are of the opinion that there is not going to be any scarcity of cotton oil at any time during the present season.

The impression appears to be that the market will encounter persistent hedge pressure from now on on the upturns, as picking is progressing rapidly in the South, and seed is moving more freely. The last ginning report indicated that in Texas considerable new seed must be available, but the question of the price of seed enters the situation. In many sections the farmer is not satisfied with present levels, but it is contended that when the Southern farmer sees everything else declining, he will be more inclined to let go of his seed. Demand for cash oil for domestic use is fair, while export demand has been less active the past week. The level of corn, it is believed, will make for much cheaper hogs later on, which should bring lard prices down. All in all, the feeling is that for the long pull, the situation does not present a phase of scarcity of grease supplies.

The vegetable oil market was quiet. Sales of a liberal quantity of Manila cocoa-

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nut oil for October shipment were reported from the Coast in buyers' tanks at 13¼c, while sellers' tanks, f. o. b., were quoted at around 13¼c. The weakness in other oils caused the easier tone in coconut oil. Soya-bean oil was quiet, with sellers' tanks quoted at 9½c for prompt shipment from the coast, and 9½c for future shipment. Peanut oil was slow, with oriental in sellers' tanks quoted at 11½c on the coast, while corn oil was rather firm, due, it is claimed, to restricted productions and was quoted at 16@16¼c for barrels refined, and 12¼@13c for crude.

CORN OIL—The market was rather firmly held with offerings light and with persistent reports of restricted production.

Demand, however, is slow and apparently going to competing oils. Crude corn oil was quoted at 12¼@13c refined in barrels, 16@16¼c, and refined in cases at \$41.46½ per gallon.

PEANUT OIL—Demand was rather slow and the market was easier with some increase in offerings of oriental oil. A weaker tone in other oil has restricted the demand. Oriental in sellers' tanks from the coast was quoted at 11½c for October shipment, while deodorized was quoted at 16@17c.

COCOANUT OIL—The market was only moderately active and was weaker. Sales were reported at 13¼c in buyers' tanks, which would make sellers' tanks of Manila oil about 13½c from the coast. The decline in the various oils was accountable for the easier tone. Sellers' tanks from the coast prompt shipment was quoted at 13¼@13½c, Ceylon in barrels 16¼@16½c, and Cochin 17@17½c. Deodorized 18@18¼c.

SOYA BEAN OIL—The market has been somewhat weaker, due to the persistent decline in crude cotton seed oil, but the market for soya bean has been practically nominal. Sellers' tanks from the coast for prompt shipment was quoted at 9½c, future shipment 9½c, crude 13½@13¾c, and deodorized 14¼@15¼c.

PALM OIL—The market was very quiet and slightly easier. Largos in casks was quoted at 10¼c a lb, Niger 10@10¼c, and Palm Kernel in barrels at 15¼c nominal.

COTTONSEED OIL—Market transactions.

Thursday, Sept. 30, 1920.

Market closed weak.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot			1290 a	
Oct.		1300 1300	1290 a	1300
Nov.			1265 a	1285
Dec.		1276 1270	1273 a	1275
Jan.		1275 1270	1272 a	1274
Feb.			1272 a	1285
Mar.		1288 1280	1281 a	1285
April			1280 a	1299
May		1290 1290	1285 a	1300

Total sales, 7,100. Prime crude S. E., 9.50 sales.

Friday, Oct. 1, 1920.

Market closed weak.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot			1300 a	1350
Oct.			1312 a	1335
Nov.	300	1310 1300	1300 a	1315
Dec.	3100	1300 1272	1290 a	1294
Jan.	4600	1299 1272	1291 a	1292
Feb.			1290 a	1305
Mar.	700	1305 1296	1300 a	1310
April			1300 a	1325
May			1310 a	1325

Total sales, 9,500. Prime crude S. E., 9.50 sales.

Saturday, Oct. 2, 1920.

Market closed steady.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot			1300 a	
Oct.			1300 a	1330
Nov.			1290 a	1310
Dec.	2600	1295 1292	1292 a	1293
Jan.	2700	1293 1290	1292 a	1293
Feb.			1290 a	1302
Mar.			1301 a	1305
April			1300 a	1325
May			1310 a	1340

Total sales, 5,500. Prime crude S. E., 9.50 sales.

Monday, Oct. 4, 1920.

Market closed steady.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot				a
Oct.	100	1275 1275	1260 a	1285
Nov.	200	1256 1256	1250 a	1270
Dec.	5300	1269 1242	1254 a	1256
Jan.	5700	1276 1240	1247 a	
Feb.			1245 a	1260
Mar.	3400	1270 1248	1255 a	1261
April			1265 a	1270
May	200	1270 1270	1265 a	1275

Total sales, 15,500. Prime crude S. E., 9.25 sales.

Tuesday, Oct. 5, 1920.

Market closed weak.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot			1250 a	
Oct.	1400	1280 1275	1260 a	1275
Nov.			1240 a	1265
Dec.	4800	1257 1247	1249 a	1251
Jan.	9100	1255 1245	1249 a	1250
Feb.			1245 a	1265
Mar.	400	1263 1260	1355 a	1261
April			1255 a	1270
May	100	1271 1271	1265 a	1270

Total sales, 17,000. Prime crude S. E., 9.00 sales.

Wednesday, Oct. 6, 1920.

Market closed strong.

	Range		Closing	
	Sales.	High. Low.	Bid.	Asked.
Spot			1250 a	
Oct.			1260 a	1270
Nov.			1260 a	1270
Dec.	4300	1270 1252	1260 a	1265
Jan.	3700	1265 1254	1262 a	1264
Feb.			1262 a	1272
Mar.	700	1282 1265	1273 a	1278
April			1275 a	1290
May	100	1295 1295	1280 a	1290

Total sales, 10,200. Prime crude S. E., 9.00 sales.

Thursday, Oct. 7, 1920.

Cotton oil market closed 11@18 points net higher. Sales, 10,200 bbls. Prime crude, 9c sales. Prime summer yellow spot closed 12.50c; October, 12.60c; December, 12.60c; March, 12.73c, all bid. Prime winter yellow and summer white, nominal.

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CASTOR OIL****CHARLES F. GARRIGUES COMPANY**10 South La Salle Street
CHICAGO, ILLINOIS**OLIVE OIL FOOTS
PALM OIL****HARDENED EDIBLE OILS
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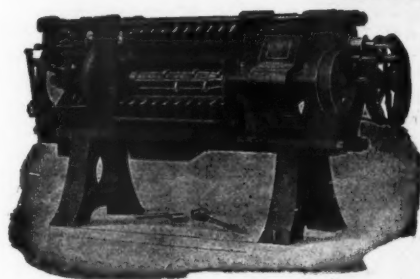
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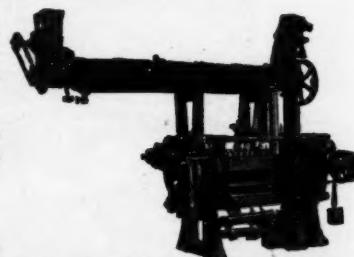
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New York

OIL DEPARTMENT

65 Broadway

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COTTON OIL MILLS START EARLY. Moisture in Seed Caused This Action to Prevent Loss from Heating.

(Special Report to The National Provisioner from the Fort Worth Laboratories.)

Fort Worth, Tex., Oct. 4, 1920.—Owing to the high moisture in the seed, some oil mills are starting to crush early this season. They found that the seed they had on hand were heating, and therefore started to crush. Some of the oil produced from this early seed has a slight hot-seed flavor. The color of this early oil is good, but the refining loss is higher than the free acid would indicate. Only a few mills are running. There is the usual wide variation in oil content of seed from different sections. Analyses are as follows:

Cake and meals:

	No. sam- ples.	Moist.	Am- monia.	Pro- tein.	Oil.	Stand- ard.
Avg. all mills.	121	9.00	8.46	43.50	6.18	.73
Best. avg.	1	9.07	8.83	45.35	5.50	.62
Worst avg.	...	8.25	8.06	44.50	8.37	.96
Annual average						
last year	5500	8.70	8.50	43.69	7.01	.82

Hulls:

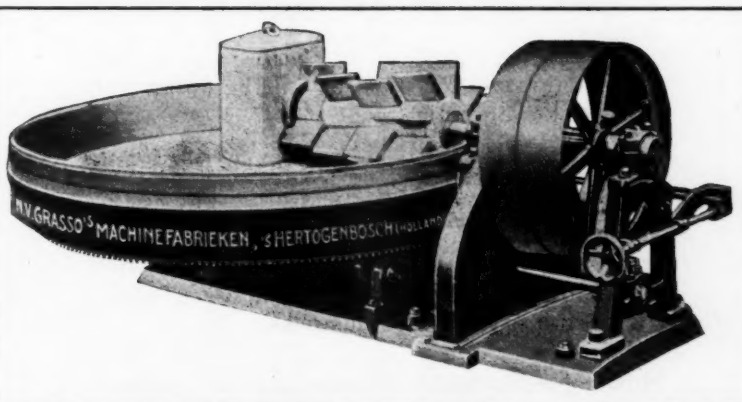
	No. sam- ples.	Whole seeds and oil in meats.	Am- monia in hulls.	Total oil.	Loss per ton seed.	Stand- ard.
Avg. all mills.	14	...	.63	.67	.07	1.78
Best. avg.	...	...	.34	.37	...	.98
Worst avg.	...	...	.78	.83	.26	2.21
Annual average						
last year	1886	.10	.06	.72	.18	1.92

Seeds:

	No. sam- ples.	Moist.	Am- monia in seed.	Per cent oil.	Gals. oil per 100 lbs. waste.	Lbs. cake 9% am- monia.
Avg. all mills.	54	13.78	3.81	17.45	36.6	904
Best. avg.	...	15.80	3.25	20.85	45.2	771
Worst avg.	...	9.44	3.60	16.30	33.0	855
Average this month last year	85	9.92	4.16	17.42	36.6	988
Annual avg.						
last year	1400	10.63	3.95	18.07	38.2	937

Crude oil:

	No. sam- ples.	Refining loss.	Color.	Acid free.
Average all mills.	43	15.1	11.4	8.4
Best average	...	7.1	5.6	.8
Worst average	...	27.9	21.6	7.0
Annual avg. last year	2187	19.0	14.4	5.3



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positively will break the lumps in nut butter.

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CHICAGO, ILL.

J. G. GASH RETIRES.

Joseph G. Gash, vice president and general sales manager of the American Cotton Oil Company, has resigned and retired after over thirty years continuous service with the company. Mr. Gash has been one of the best-known figures in the cotton oil field for many years, and has been a prominent member of the New York Produce Exchange during that period. He has been a leader in the Inter-State Cotton Seed Crushers' Association, and an authority especially in the formulation and enforcement of trading rules. His dynamic

personality will be missed in these circles. Mr. J. Frank Rogers has been appointed general sales manager to succeed Mr. Gash.

NEW ORLEANS MARKETS.

(Special Wire to The National Provisioner.)

New Orleans, La., Oct. 7, 1920.—Crude barley steady; 8½c bid, 9c asked. Liberal sales this week at 9@9½c. Seven per cent meal easier at \$45@50 per ton New Orleans. Seven per cent loose cake offered at \$38@50 f. o. b. interior points. Hulls dull; \$9.25 loose, \$14 sacked, New Orleans.



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THE WEEK'S CLOSING MARKETS

FRIDAY'S CLOSINGS.

Provisions.

Provision prices rallied at the close of the week with reports of an improved foreign demand for both lard and meats. Germany was credited with buying rather liberal amounts of both, particularly lard, at prices equal to 23 to 23½c. This premium over the market was thought to be the result of arrangements for payment. German demand is expected to be good, provided reasonable credit arrangements can be effected. The foreign demand brought considerable covering of shorts and a somewhat more hopeful tone. Domestic trade continued moderate. The market opened stronger Friday with hogs, but fell off later with grains.

Cottonseed Oil.

Cottonseed oil continued under pressure at the close of the week. Some foreign inquiries for oil were reported, but owing to weakness in exchange were out of line. The question of foreign credits was another factor in the situation. Crude oil was nominally ¼c higher, with Southeast quoted at 9c bid and 9¼c asked. Some moderate purchases are reported at 9c recently in the Southwest. Local sentiment continues bearish, with the trade reflecting the feeling regarding general readjustment in commodity values. The market was weak Friday on Southern selling and lack of support.

Closing quotations on cottonseed oil on Friday: October, \$12.00@12.50; December, \$12.30@12.35; January, \$12.30@12.35; March, \$12.35@12.50; May, \$12.50@12.66.

Tallow.

Special loose quoted at 9¼c.

Ole Stearine.

Quoted at 16c. Extra oleo oil, 21¼c.

FRIDAY'S GENERAL MARKETS.

Lard in New York.

New York, Oct. 8, 1920.—Spot lard at New York prime Western, \$20.50@20.60; Middle West, \$20.25@20.35; city steam, \$19.50@19.75; refined continent, \$23.50; South American \$23.75; Brazil kegs, \$24.75; compound, 16@17c.

Marseilles Oils.

Marseilles, Oct. 8, 1920.—Copro fabrique, —fr.; copra edible, —fr.; peanut fabrique, —fr.; peanut, edible, —fr.

Liverpool Produce Market.

Liverpool, Oct. 8, 1920.—(By Cable).—The British government has control of the market and no quotations are available. Australian tallow at London 74s 6d@88s 6d.

Hull Oil Markets.

Hull, England, Oct. 8, 1920.—(By Cable).—Refined cottonseed oil, 76s; crude 65s.

ARGENTINE BEEF EXPORTS.

Cable reports of Argentine exports of beef for the week up to Oct. 8, 1920, show exports from that country were as follows: To England, 173,265 quarters; to the Continent, 77,848 quarters; to other ports, 57,978 quarters. Exports for the previous week were as follows: To England, 109,980 quarters; to the Continent, none; to other ports, none.

MEAT SUPPLIES AT PHILADELPHIA.

Receipts of Western dressed meats and local slaughters under city and federal inspection at Philadelphia, Pa., are officially reported as follows for the week ending Oct. 1, 1920, with comparisons:

Western dressed meats:	This week.	Last week.
Steers, carcasses	2,650	2,950½
Cows, carcasses	1,125½	1,062
Bulls, carcasses	80	116
Veal, carcasses	1,730	2,218
Lamb, carcasses	6,707	5,652
Mutton, carcasses	2,606	3,332
Pork, lbs.	210,420	155,055
Local slaughters:		
Cattle	2,387	2,814
Calves	1,948	2,223
Hogs	17,118	17,338
Sheep	8,793	9,632

RECEIPTS AT CENTERS

SATURDAY, OCTOBER 2, 1920.

	Cattle.	Hogs.	Sheep.
Chicago	3,000	4,000	2,000
Kansas City	700	500	—
Omaha	200	1,500	—
St. Louis	400	1,800	100
St. Joseph	200	1,500	—
Sioux City	400	2,000	300
St. Paul	1,000	600	3,000
Oklahoma City	300	300	—
Fort Worth	300	500	—
Milwaukee	—	100	—
Denver	400	200	3,400
Louisville	500	1,200	500
Wichita	300	200	—
Indianapolis	200	4,000	200
Pittsburgh	300	1,800	300
Cincinnati	400	3,800	400
Buffalo	200	1,900	1,500
Cleveland	200	1,000	200
Nashville, Tenn.	300	200	100
New York	660	4,050	3,615
Toronto	900	500	400

MONDAY, OCTOBER 4, 1920.

	Cattle.	Hogs.	Sheep.
Chicago	24,000	20,000	35,000
Kansas City	22,000	7,000	16,000
Omaha	15,500	3,000	45,000
St. Louis	7,000	12,000	2,000
St. Joseph	4,000	3,500	6,000
Sioux City	8,200	8,000	16,500
St. Paul	16,200	5,700	—
Oklahoma City	2,700	1,400	700
Fort Worth	3,500	2,000	700
Milwaukee	400	700	200
Denver	3,200	600	8,000
Louisville	3,000	1,800	300
Wichita	1,700	1,000	—
Indianapolis	1,000	7,000	200
Pittsburgh	2,300	5,000	4,900
Cincinnati	3,300	5,700	1,000
Buffalo	2,600	10,400	2,000
Cleveland	1,500	4,000	2,000
Nashville, Tenn.	1,500	1,500	300
Toronto	3,000	1,300	5,700

TUESDAY, OCTOBER 5, 1920.

	Cattle.	Hogs.	Sheep.
Chicago	8,000	18,000	26,000
Kansas City	13,000	12,000	12,000
Omaha	15,000	3,000	26,000
St. Louis	4,000	9,500	2,000
St. Joseph	3,500	5,000	2,000
Sioux City	1,500	5,000	4,000
St. Paul	3,600	5,500	15,000
Oklahoma City	800	1,000	100
Fort Worth	2,000	1,500	500
Milwaukee	500	500	700
Denver	1,300	400	1,100
Louisville	600	800	200
Wichita	1,000	1,200	—
Indianapolis	1,200	9,000	1,000
Pittsburgh	200	1,000	600
Cincinnati	500	3,000	1,000
Buffalo	200	2,700	2,300
Cleveland	200	2,500	400
Nashville, Tenn.	200	1,500	—
Toronto	1,400	600	2,000

WEDNESDAY, OCTOBER 6, 1920.

	Cattle.	Hogs.	Sheep.
Chicago	9,000	10,000	25,000
Kansas City	7,000	6,000	8,500
Omaha	9,000	4,000	22,000
St. Louis	2,500	10,000	2,000
St. Joseph	4,000	5,000	2,000
Sioux City	3,500	6,500	3,000
St. Paul	5,200	9,500	4,000
Oklahoma City	2,000	2,000	300
Fort Worth	1,500	1,000	1,000
Milwaukee	500	2,500	500
Denver	1,200	100	15,100
Louisville	400	1,300	200
Wichita	600	900	200
Indianapolis	700	6,000	500
Pittsburgh	—	1,300	1,000
Cincinnati	500	2,000	800
Buffalo	200	1,300	1,300
Cleveland	500	1,500	600
Nashville, Tenn.	500	800	200
Toronto	1,000	1,400	4,000

THURSDAY, OCTOBER 7, 1920.

	Cattle.	Hogs.	Sheep.
Chicago	12,000	18,000	24,000
Kansas City	5,500	4,000	7,500
Omaha	8,000	3,000	13,000
St. Louis	2,500	5,000	1,200
St. Joseph	2,500	2,500	3,000
Sioux City	1,800	4,000	1,000
St. Paul	1,700	4,500	7,500
Oklahoma City	800	500	—
Fort Worth	2,000	1,200	1,300
Milwaukee	800	3,000	400
Denver	1,300	1,200	8,000
Louisville	800	6,000	800
Wichita	—	1,200	700
Indianapolis	1,100	2,300	600
Pittsburgh	800	900	800
Cincinnati	800	0.100	4,000
Buffalo	—	—	—

FRIDAY, OCTOBER 8, 1920.

	Cattle.	Calves.	Sheep.	Hogs.
Chicago	6,000	12,000	7,000	—
Kansas City	1,700	2,500	500	—
Omaha	1,300	4,000	2,500	—
St. Louis	1,800	5,000	300	—
St. Joseph	1,000	3,000	600	—
Sioux City	1,500	4,500	500	—
St. Paul	1,700	2,300	1,500	—
Oklahoma City	400	800	—	—
Fort Worth	1,500	1,000	400	—
Milwaukee	400	1,500	200	—
Denver	1,100	100	2,800	—
Indianapolis	—	600	900	—
Pittsburgh	100	2,000	200	—
Cincinnati	800	3,000	1,000	—
Buffalo	600	0.100	4,000	—

NEW YORK LIVE STOCK.

Receipts for week ending Oct. 2, 1920:

	Cattle.	Calves.	Sheep.	Hogs.
Jersey City	5,437	5,515	27,856	10,061
New York	1,146	3,067	4,069	12,732
Central Union	2,060	1,431	10,440	—
Total for week	8,679	10,063	42,371	22,813
Previous week	10,219	11,500	38,020	30,062
Two weeks ago	10,419	10,317	37,833	23,280

PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ending Oct. 2, 1920, are reported to The National Provisioner as follows:

CHICAGO

	Cattle.	Hogs.	Sheep.
Armour & Co.	7,415	13,400	16,870
Swift & Co.	7,877	12,000	22,871
Morris & Co.	5,426	6,400	8,345
Wilson & Co.	6,342	7,500	11,352
G. H. Hammond Co.	3,932	7,000	—
Anglo-Amer. Prov. Co.	380	6,000	—
Libby, McNeill & Libby	945	—	—
Brennan Packing Co.	2,200	hogs;	Boyd-Lunham
& Co.	4,700	hogs; others,	10,000

OMAHA

	Cattle.	Hogs.	Sheep.
Morris & Co.	2,855	3,030	4,503
Swift & Co.	6,762	3,978	11,440
Cudahy Packing Co.	6,295	5,733	11,250
Armour & Co.	5,019	3,863	13,499
J. W. Murphy	—	4,798	—
Swartz & Co.	—	538	—

ST. LOUIS

	Cattle.	Hogs.	Sheep.
Armour & Co.	4,290	4,122	2,385
Swift & Co.	3,287	3,594	1,919
Morris & Co.	4,825	6,346	2,082
St. Louis D. B. Co.	1,792	—	—
Independent Packing Co.	751	1,811	—
American Packing Co.	367	1,303	—
East Side Packing Co.	88	1,829	—
Kroy Packing Co.	80	3,161	—
Heil Packing Co.	14	2,122	—

KANSAS CITY

	Cattle.	Hogs.	Sheep.
Armour & Co.	5,425	5,049	5,650
Wilson & Co.	5,268	5,475	3,788
Fowler Packing Co.	1,182	—	463
Swift & Co.	6,386	4,196	7,339
Cudahy Packing Co.	4,406	3,748	4,234
Morris & Co.	4,281	3,857	2,706
Butchers	1,440	507	177

SLAUGHTER REPORTS

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending Oct. 2, 1920:

Cattle.

	Cattle.
Chicago	44,874
Kansas City	29,664
Omaha	29,304
East St. Louis	4,703
Sioux City	8,068
Cudahy	806
South St. Paul	16,421
Philadelphia	4,683
Indianapolis	15,742
New York and Jersey City	15,742
Oklahoma City	4,982

Hogs.

	Hogs.
Chicago	87,984
Kansas City	23,770
Omaha	14,969
East St. Louis	47,500
St. Joseph	20,800
Sioux City	6,714
Cudahy	5,100
Cedar Rapids	6,569
Ottumwa	26,155
South St. Paul	15,900
Fort Worth	15,900
Philadelphia	20,413
Indianapolis	22,813
New York and Jersey City	11,629
Oklahoma City	10,100
Milwaukee	11,300
Cincinnati	—

Sheep.

	Sheep.
Chicago	72,280
Kansas City	62,277
Omaha	63,226
East St. Louis	6,973
Sioux City	4,871
Cudahy	341
South St. Paul	11,284
Philadelphia	8,300
Indianapolis	694
New York and Jersey City	42,371
Oklahoma City	28

FOREIGN EXCHANGE SITUATION.

[Editor's Note.—This statement is prepared weekly by the Institute of American Meat Packers from information obtained from The Merchants Loan & Trust Company, Chicago, Illinois.]

Country.	Monetary unit.	Par value in U. S. money.	Value on Oct. 7, 1920.
Austria—Krone	—	\$.203	7.1520.
Belgium—Franc	—	.193	.0704.
Czechoslovakia—Krone	—	—	.0131.
Denmark—Krone	—	.268	.1400.
Finland—Finmark	—	.193	.0285.
France—Franc	—	.193	.0668.
Germany—Mark	—	.238	.0160.
Great Britain—Pound	—	4.866	3.5000.
Greece—Drachma	—	.193	.1030.
Italy—Lira	—	.193	.0390.
Japan—Yen	—	.408	.5100.
Jugo-Slavia—Krone	—	—	.085.
Netherlands—Florin	—	.402	.3100.
Norway—Krone	—	.268	.1590.
Poland—Polish Mark	—	—	.045.
Roumania—Leu	—	.193	.0195.
Russia—Rouble	—	.515	—
Serbia—Dinar	—	.193	.0275.
Spain—Peseta	—	.193	.1470.
Sweden—Krona	—	.193	.1939.
Switzerland—Franc	—	.193	.1610.
Turkey—Turkish Pound	—	4.40	—

LIVE STOCK MARKETS

CHICAGO

(Special Letter to The National Provisioner.)

Union Stock Yards, Chicago, Sept. 23.

The cattle market rallied sharply this week after the previous two weeks' slumpy conditions, and steers have recovered practically all of the previous week's losses. Receipts locally of 54,000 are 9,000 less for the four days than same time last week, and 232,500 cattle for the period at the ten markets is 29,000 less than last week. This was the underlying basis of strength from the selling side, while the passing of the Jewish holidays, fairly broad meat distribution and a better demand for cattle suitable for a short feed were the dominant features of the demand. Strength in prices was noted all along the line from choice steers downward, the strong and unfilled demand for the better grades of beef steers causing buyers to skim the cream off the plainer offerings. As a result, the grades which suffered worst in the recent slump came back strongest and the price range on anything suitable for slaughter has narrowed upward. A new top for the present season was made today at \$18.50, paid for a four-car drove of 1,098 lb. S. M. S. heifers long yearling fed in Iowa. This is the best price since early in January. Half a dozen loads were choice enough to exceed the recent top, bringing \$18.40, and 12 or 15 loads were of sufficient quality to sell at \$17.50@18.35. Good steers sold largely at \$15.50@17, with medium grades at \$11.50@15, and common stock largely \$9@11.25. Advances have been just as uneven as was the decline, but average values show an increase of 35@50c on fairly choice to best steers and yearlings, 75c@ \$1.25 on medium to good steers and 75c@ \$1 on most of the commoner grassy kinds. Spots in the market show still greater advances and the market today has practically recovered the losses sustained during the last week in September, and in instances medium and good steers, which were pounded hardest, have also taken up part of the losses made two weeks ago. Butcher cows and heifers, especially the fair to good kind of the latter, which had met depressing conditions since August, rallied sharply in sympathy with the improvement in the steer trade and under fairly good shipping inquiry have shown a much better tone and higher prices. Cows show an average \$1 advance with heifers largely \$1@1.50 higher. Canners are back to \$4 and \$2.45, or 25@40c higher. Bologna bulls, which recently have been in only fair supply and light demand, show about 50c advance this week, bulk going at \$6@6.75, with a few on the butchery order higher and trashy kinds down to \$5. Butcher bulls are scarce and nominally strong. A fairly even price range has ruled on choice veal calves for the week, bulk selling at \$17@17.50, but the undertone has been weak and bulk have sold nearer the inside figure than the top. Grassy shipping calves have been strong and higher, many sales showing \$1@1.50 higher than late last week at \$6.50@11.50. Receipts of western rangiers are much lighter after the heavy runs of last week, only around 16,500 head arriving, compared with 28,000 a week ago. Bulk were common to fair quality and have advanced an average \$1, bulk selling at \$8.25@10.75, with few good enough to bring over \$12.

After a slightly higher start on Monday a severe break took place on Tuesday, but by Wednesday morning the selling forces had steadied themselves to such an extent that a higher market ensued yesterday and today. Chicago receipts for the first four days this week, at about 37,000, showed a decrease of around 14,000 from like period last week. The ten market total for week to date, at about 255,000, shows a decrease of 32,000 from same period a week ago and a shrinkage of 62,000 from corresponding period last year.

These lighter receipts here and around the market circle, together with a broadening of the shipping demand, especially the past two days, have been the principal factors in the recovery Wednesday morning. (Continued on page 37.)

KANSAS CITY

(Special Letter to The National Provisioner.)

Kansas City Stock Yards, Oct. 6.

Cattle prices today were strong to 25 cents higher with the trade active, and the market shows indications of having passed into a firmer position. Both killers and feeders were active. Hog prices, which closed \$1.00 lower Tuesday were strong to 25 cents higher, mostly 15 cents up today. The top price was \$14.80. Sheep and lambs were in fairly active demand at steady prices. Receipts today were 5,500 cattle, 5,000 hogs, and 7,000 sheep, compared with 9,000 cattle, 7,500 hogs, and 10,000 sheep a week ago, and 20,200 cattle, 9,500 hogs, and 17,900 sheep a year ago. Light receipts today forced killers into active competition for practically all classes of cattle. The quality of the offerings was plain, and fat steers held over from preceding days were taken readily. Prices were quoted strong to 25 cents higher. Some short fed steers sold at \$14.00 to \$15.25. No full fed steers here. The bulk of the grassers were plain light weights that sold at \$7.75 to \$9.50, a few up to \$11.50. Cows and heifers were stronger, and in fairly active demand. Veal calves were steady at Tuesday's advance, top \$16.00.

Demand for hogs was more urgent and the market rallied moderately from the low close Tuesday. The quality of the offerings was plain. The top price was \$14.80 and bulk of sales \$14.25 to \$14.75. Prices are just \$3.00 under the high point in September. Packers were the principal buyers and the advance in the market without shipping competition indicates that packers think prices are low enough for a reaction. Pigs and thin hogs were steady.

Prices for sheep and lambs were not quotably changed. Trade was rather slow in mutton grades. The bulk of the offerings were western lambs that sold at \$12@12.65. Ewes sold mostly at \$4.75 @5.25. A liberal supply of feeding lambs sold at \$11.25@11.60.

ST. LOUIS

(Special Letter to The National Provisioner.)

National Stock Yards, Ill., Oct. 6.

The cattle run does not improve much. We had for the week ending today around 20,000 head, and the character of the offerings is much the same as it has been for the past month. The quotations on the best killing cattle indicate steady prices, but the limited supply in this class does not completely test out the market. A range of \$13.25@14.50 covers these sales, and while no doubt considerably higher figures would be paid on the choice or prime cattle, none have been offered for sale. On medium and common cattle the market for the week is perhaps 50c lower than this time a week ago but at this writing a steady tone is noted, and the market is called steady with the decline. A lot of medium cattle are going to scale at \$10.75@12.50, while the common cattle that are good enough to be called beef cattle range from \$8.50 @9.50. Southwestern steers, including what few we are receiving now from Texas, range from \$9.00@10.25. The volume of this business has very materially diminished, and the report comes to us that the recent decline in prices together with the fact that there is still fair grazing in Oklahoma and Texas have induced the shippers to hold back their cattle hoping for better prices. There are still some

very good cattle in Oklahoma and Texas, and an upturn in prices would no doubt bring them out. Butcher stock in the past three days has shown very little change from the early part of the week. Trading is more or less slow, and prices no better than steady. The feature in this department is the rather good call for butcher cows; medium to fair kinds range from \$7.00@8.25, with the best beef grades going up to \$9.00.

Our hog run this week has shown some improvement, there being something like 64,000 in the count. Prices have been very uneven, but the general trend has been downward, and are today \$1.50@1.65 lower than a week ago. While the general quality is fair, yet real good hogs are scarce, and as the good ones comprise the kind that the Eastern shippers require, their scarcity has had much to do with the decline in prices. The proof of this is brought out in the fact that light hogs in the shipping weights are today selling 25@40c under the top, whereas the good ones in this class usually sell at the top of the market. Today's quotations are: Mixed and butchers, \$15.35@15.90; good heavys, \$15.25 @15.60; roughs, \$12.75@14.00; lights, \$15.25 @15.40; pigs, \$13.50@15.00; bulk, \$15.30@15.65.

The sheep run this week was very light, there being but 9,000 recorded. Notwithstanding the light run, prices are unevenly lower. Light muttons are selling around \$5.50, with the heavier kinds around \$5.00. Some fair to good bunches of yearling wethers cleared during the week at \$9.50 @10.00. Best lambs are quoted at \$12.00, but the bulk in this department ranges from \$11.00@11.50.

OMAHA

(Special Letter to The National Provisioner.)

South Omaha, Nebr., Oct. 6.

A let-up in cattle receipts this week has been largely responsible for more activity in the trade, although prices have remained practically steady at last week's low levels. A few scattering loads of corned steers are still showing occasionally and a load of fancy long-fed yearlings landed at \$17.50, or as high as at any time this season. A load of fancy 1,500-lb. grass cattle sold this week at \$13.75, but sales above \$11.00 have been very scarce and bulk of the range steers sell to both feeders and packers around \$8.50@10.00. Cows and heifers have also developed more life and a broader demand but the range of prices is still practically from \$4.00@8.00, with fair to good butcher and beef stock largely at \$6.00@7.00. A contributing cause, if not the main factor, in the depressed condition in the market at this time is the slack demand in the country for feeder cattle, although these are selling lower than at any time during the past four years.

Local supplies of hogs continue very light but owing to extremely bearish conditions at other points the market has been working toward lower levels and undertone is decidedly weak. There is no urgent demand from any quarter and all classes of buyers have assumed a bearish attitude towards the market, insisting that live hogs must sell lower in order to be on a parity with provisions. With only about 4,000 hogs here today the market showed some improvement on shipping grades, but packing hogs moved very slowly at unchanged figures. Tops brought \$15.25 as against \$16.15 on last Wednesday and bulk of the trading was at \$14.35@14.75 as against \$15.00@15.50 one week ago.

Sheep and lambs are still coming to market rather freely although receipts are falling far short of last year. Without the supporting influence of a broad feeder demand prices have been working downward for several days and the general market is around half dollar lower than a week ago. Fat lambs are quoted \$11.50@12.35, yearlings at \$7.75@8.75, wethers \$5.50@6.50, and ewes \$4.00@5.00.

ICE AND REFRIGERATION

ICE NOTES.

C. S. Guin plans to build an ice plant at Ballinger, Tex.

The Crystal Ice Corporation is erecting an ice plant at Cheyenne, Wyo.

The Piggott Bottling Works, Piggott, Ark., plans to erect an ice plant.

The Federal Ice & Refrigerating Company will erect a \$250,000 plant at Jacksonville, Fla.

The Boley Ice & Fuel Company has been organized at Boley, Okla., and will erect a \$5,000 building.

The McKinney Ice & Coal Company, McKinney, Tex., has completed a \$60,000 addition to its plant.

The Rio Grande Valley Ice Company has been incorporated at Houston, Tex., with a capital of \$30,000.

The Magnus Brewing Company, Buffalo, N. Y., has engaged in the cold storage and warehouse business.

The Merchants' Ice Company, of Harrisburg, Pa., has increased its capital stock from \$50,820 to \$106,650.

Lester R. Weller & Son, Ocean Grove, N. J., will build a coal and ice plant at a cost of approximately \$20,000.

A \$25,000 addition to the plant of the Oldsmar Electric & Ice Company, at Oldsmar, Fla., is now under construction.

The Ware Shoals Manufacturing Company will erect an ice and dairy plant at Ware Shoals, S. C.

The Clark Fruit Company is installing a refrigerating plant of 18 tons capacity in its wholesale house at Coffeyville, Kans.

Frank Varino & Company plan to erect a refrigeration plant at West Monroe, La., which will cost from \$50,000 to \$60,000.

The Oliver Ice Company, Miami, Fla., has made application for a charter and has let a contract for the construction of an ice plant of 225 tons daily capacity.

E. S. Gay has sold his ice business at Tipton, Ia., to Fred Percunni, who will operate it in connection with his ice cream business.

The ice plant of the Newton Ice & Fuel Company, Newton, N. C., has been destroyed by fire, entailing a loss of \$40,000 to \$50,000.

The annual convention of the National Association of Ice Industries was held in St. Louis, Mo., Tuesday, Wednesday and Thursday of this week.

A company is being organized in Columbus, Ind., for the purpose of building and operating an ice plant. The company will be capitalized at \$50,000 and will be known as the Consumers' Ice Company.

The William F. Messick Ice Company was recently organized in Salisbury, Md., and capitalized at \$150,000. Work has started on the construction of an ice plant which will have a capacity of 30 tons daily.

PLAN REFRIGERATION MERGER.

The American Association of Ice and Refrigeration will be the name of the new organization which was launched at Atlantic City, N. J., September 25. It will include all of the important ice and refrigeration interests in the country, such as storage plants, ice manufacturing organizations and refrigerating plants. Among those participating in the meeting at Atlantic City were the American Association of Refrigeration, the National Association of Ice Industries, the National Ice Association of America, the New York State Cold Storage Association, the American Society of Refrigerating Engineers and the Eastern Ice Manufacturers' Association. The new organization will embrace more than 2,500 firms and corporations.

COLD STORAGE HOLDINGS OF FISH.

The monthly report of the Bureau of Markets, United States Department of Agriculture, shows the following cold storage holdings of frozen and cured fish on September 15, 1920: Frozen fish, 56,202,350 pounds, compared with 69,580,555 pounds September 15, 1919, and 89,203,946 pounds same date 1918. Cured herring, 22,753,351 pounds, compared with 34,365,086 pounds September 15, 1919, and 27,311,155 pounds same date 1918. Mild cured salmon, 8,274,738 pounds, compared with 10,756,865 pounds, September 15, 1919, and 6,543,291 pounds same date 1918.

WILSON ON BUSINESS SITUATION.

(Continued from page 19.)

added to the pay envelope by lowering the cost of commodities through increased production.

"Labor and industry should recognize that their interests are mutually dependent and should endeavor to co-operate in the solution of their problems. Autocratic management of industry on one side, with a militant, bitter and class-conscious organization of labor on the other side, will no longer be supported by public opinion, and where such a condition exists it presents a problem the solution of which must be found.

"If the men who represent all grades and kinds of business and labor in the United States could unite in a movement, not to fight each other, but firmly to expose the omissions of each and fairly spread the truth, they might find a common ground for co-operation and turn the whole trend of events toward a more amicable solution of their common problems."

Changes in Meat Conditions.

As indicating the extent of the after-war adjustments which some industries have effected and which others are still facing, Mr. Wilson revealed the tremendous changes in livestock production and meat packing.

"For example," he said, "during the month of March, 1913, the United States exported only 770,392 pounds of fresh beef. In March, 1918, it exported 62,064,261 pounds, or more than 80 times that much. In March, 1920, these figures had shrunk to 6,036,166 pounds, or only about one-tenth of the quantity exported in the same month two years previously. Exports of other meat products also showed very large decreases."

After referring to losses on inventories and other occurrences in the after-war period, Mr. Wilson asked:

"If one of the largest industries of the

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DESIGNERS OF PACKING HOUSES, COLD STORAGE, ETC.,
Remodeling and Improvements, Examinations, Valuations,
Reports, Superintendence, Refrigeration, Insulation
Industrial Plants — Correspondence Invited.
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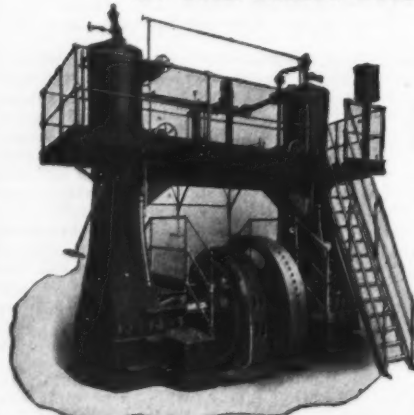
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YORK REFRIGERATING MACHINES IN THE MEAT PACKING INDUSTRY



Packing Houses are noted for their efficient operation. Hence it is only natural that one of the leading Packers should install five York Semi-Enclosed High Speed Refrigerating Machines, with direct motor mounting, during a period of three years.

While this Machine is a new creation of the York Organization, its basic features are those of the Original York Machines, which have given such universal satisfaction for more than 20 years.

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Cleveland—General Cartage & Storage Co.
Jacksonville—St. Elmo W. Acosta.
Mexico, D. F.—Ernst O. Heinsdorf.

Newark—American Oil & Supply Co.
New York City—Roessler & Hasselacher Chemical Co., 709 Sixth Ave.
Norfolk—Henry Bower Chemical Mfg. Co.
Agency, First & Front Sts.
Philadelphia—Henry Bower Chemical Mfg. Co.
Pittsburgh—Pennsylvania Transfer Co., Duquesne Freight Station; Pennsylvania Brewers Supply Co., Union Arcade Bldg.

Providence—Rhode Island Warehouse Co., Edwin Knowles.
Richmond—Bowman Transfer & Storage Co.
Rochester—Rochester Carting Co.
Savannah—Benton Transfer Co.
Toledo—Moreton Truck & Storage Co.
Washington—Littlefield, Alvord & Co.

country can make such a readjustment without demoralization or serious impairment of credit, is it not fair to say that with decent courage and moderate wisdom the whole industrial organization of the nation, insofar as it may be engaged in rendering a necessary or legitimate service to the public, can look forward with confidence, secure in the assurance that panic psychology will not find any widespread reflection in the public mind?

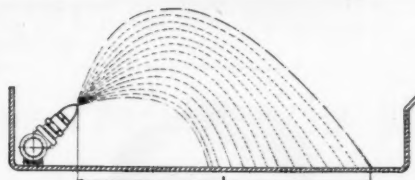
"Industry has many great problems yet to be solved. Sacrifices are being made under the pressure of local conditions in some sections. Many commodities are now being disposed of at a loss and raw material in many instances at less than cost of production. Especially is this true of the live stock industry.

Producers Must Be Considered.

"In the agitation to reduce the cost of living, the consuming public should have a regard for its future supplies of basic necessities, and not carry it to the extent of discouraging production. The public should bear in mind that it requires much time to grow and develop meat food animals. Herds can be reduced much faster than they can be built up. The shrinkage in values suffered during the last year has discouraged production of livestock. Meat has experienced the greatest decline of any prime necessity. It is today comparatively one of the cheapest of our foods, yet in many misinformed quarters there is continued agitation against the industry."

Mr. Wilson also said:

"It is time for Washington and the industries of the country to realize that the war is over. What this country needs now is a revival of that spirit of individual enterprise and high industrial purpose upon which the greatness of this country has been built. Business should realize that it is now time to grasp again the helm of its own destiny, and take up once more the task of steering into broader channels of service. Business should realize that it cannot rely upon the Government to solve its problems through legislative enactments. Industry should do more to educate the people in regard to its business."



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THE "TWO-VANE" BRINE SPRAY NOZZLE

Leading packers everywhere employing brine spray nozzles for hog and beef coolers have adopted "SPRA-RITE" Brine Spraying Equipment by reason

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Chicago Section

F. A. Bingham, of the Farmers' Co-operative Packing Company, Rockford, Ill., was in the city this week.

Packers' purchases of livestock at Chicago the first three days of this week totaled 23,084 cattle, 39,705 hogs and 52,418 sheep.

John J. Dupps, Jr., vice president of the Cincinnati Butchers Supply Co., was in Chicago this week on his way to visit clients in the Northwest.

F. W. Brode & Co., Memphis, Tenn., the well-known cottonseed products commission house, has opened an office in Chicago with Frank R. Johnson in charge.

Swift & Company's sales of carcass beef in Chicago for the week ending Saturday, October 2, on shipments sold out, ranged from 9 cents to 29 cents per pound and averaged 16.92 cents per pound.

Robert J. Dunham resigned this week as a director of the Continental & Commercial National Bank, and the vacancy was filled by the election of F. W. Croll, treasurer of Armour & Company.

President S. T. Nash of the Cleveland Provision Co. and Vice President T. W. Tallafiero of Hammond Standish & Co., Detroit, were in Chicago last week attending Institute committee meetings.

A. Z. Baker, traffic manager of the Cleveland Provision Co., was in Chicago this week attending a meeting of the Traffic Committee of the Institute of American Meat Packers, of which he is a member.

Theo. G. Crane of The Airoblast Corporation has just returned from an eastern trip, having called at Boston, New York, Brooklyn, Philadelphia, Baltimore and Washington. He reports good business throughout the East.

Visitors to Chicago this week included James G. Cownie, export manager of the Jacob Dold Packing Co., Buffalo, N. Y.; E. C. Merritt, vice president of the Indianapolis Abattoir Co.; A. L. Eberhart of Geo. A. Hormel & Co., Austin, Minn., and Fred Hemig of the Wilson Provision Co., Peoria, Ill.

Asa A. Davidson, vice president of the American Meat Packers' Trade & Supply Association—and incidentally a broker—returned this week from an extended Eastern tour following the Atlantic City convention. He is an enthusiastic booster for the organization, and the boys have all got to line up when he comes along.

George B. Robbins, vice president of Armour & Company, and for many years head of the Armour car lines, has announced his resignation to take effect November 1. He will retain his Armour connections, however, becoming president of the Sutter Basin Company, a California land reclamation project fostered by J. Ogden Armour. His future headquarters will be in San Francisco.

Announcement is made of the election of Harry E. Altman as secretary and treasurer of the Canada Casing Co. of Illinois, which took place at a recent meeting of the board of directors of the company. Mr. Altman is one of the best-known casing men in the country, having been brought up in that department in the old

Edwin S. Meier, of B. Meier & Son, New York, was in Chicago this week on business for his company, which is one of the most active houses in the meat specialty line in the East.

Announcement was made on Thursday that directors of Wilson & Company had declared the regular quarterly dividends of 1¼ per cent on the common stock and 1½ per cent on the preferred stock of the company. The common stock dividend is payable Nov. 1 to holders of record Oct. 21.

Both Edward Morris and J. Ogden Armour were among those who complimented Charles A. Comiskey on his attitude toward certain of his ball-players involved in the recent scandal. Mr. Morris suggested that a day be set for a celebration at White Sox Park, to be known as "Comiskey Day," at which the fans might see the "clean" team play and contribute the proceeds to worthy objects. Unfortunately this could not be done, as Eddie Collins and other players had already made other engagements which prevented.

SWIFT & COMPANY NOTE ISSUE.

Swift & Company are issuing \$40,000,000 worth of 7 per cent, five year gold notes, in denominations of \$1,000, \$500 and \$100. The notes are issued for the purpose of providing additional funds to carry on their ever expanding business. Interest will be payable October 15 and April 15. The notes are redeemable at the option of the company on three days' notice, as follows: April 15, 1921, at 102 and interest, and at ¼ per cent of par less for every six months thereafter. Price of the notes is 97½ with interest.

The Notes are followed by \$150,000,000 authorized and issued capital stock, upon which dividends at the rate of 8 per cent per annum are now being paid. The company has paid cash dividends without interruption for the past thirty-five years. Total sales of the Company's products have increased from \$250,000,000 in 1909 to over \$1,200,000,000 in 1919.



HARRY E. ALTMAN
Sec. & Treas. Canada Casing Co. of Ill.

S. & S. Company. Later he was branch house manager for Wilson & Co. at Baltimore, and then with the Harris Abattoir Co., Ltd., of Toronto, from which connection he went with the Canada Casing Co. to become its sales manager. He is known as a sausage expert, and his acquaintance in the casings business throughout Canada and the United States is very wide. He is succeeded by George T. Manion as sales manager.

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**UNION STOCK YARDS
CHICAGO**

CHICAGO LIVESTOCK MARKETS.

(Continued from page 33.)

ing and subsequent advances. The \$16 top reappeared today and the market closed mostly steady with Thursday a week ago, except that hogs averaging from 170 lbs. down are largely 15¢@25¢ lower and harder to clear. Demand was best for choice 200 to 240 lb. offerings, putting them in position to command the top prices, while choice 250 to 300 lb. hogs, suitable for shippers, were able generally to sell within 10¢@25¢ of the desirable light butchers. Pigs were on the up grade since Monday, owing to the stimulus of outside orders, and showed 25¢@50¢ gain for the week, desirable ones cashing mostly at \$14 @14.50 today.

Severe depression in values of dressed mutton and lamb at Eastern centers late last week had a bearish effect on the late market for stock on foot last week, but a comparatively moderate supply this week tended to hold prices about steady with the extreme low close last week. After a 25¢ lower opening Monday the trade improved and there was some strength the following day. Prices today were about steady with Monday on fat lambs, although 25¢@50¢ lower than a week ago. Choice Idaho lambs, which sold at \$13.40

Tuesday, Wednesday and Thursday of this week, were mates of those last Thursday at \$13.75. Sellers found it a hard matter to get \$13 on the big end of good killing westerns, however, and many moved at \$12.50@12.90. A few choice ewe and wether native lambs went to city butchers as high as \$12.50@12.60 today, but very few passed \$12.25. There was a large proportion of sheep and yearlings on sale this week, but demand was good and prices show only small losses from a week ago today and some improvement from the low

close last week end. Trade on the common and medium killing grades has been adversely affected by a slack country demand for feeding stock. The week's supply has been fairly evenly divided between native and Western stock, but general quality has not been rated good. Shipping demand on Eastern account helped strengthen prices for fat ewes, choice heavyweight westerns going to \$5.35 today. Choice Montana yearling wethers brought \$10 Wednesday, with aged wethers in the same shipment at \$7.75.

BONE CRUSHERS



WILLIAMS

Williams Bone Crushers and Grinders are not alone suitable for grinding bone for fertilizer purposes, they are also suitable for crushing bone for glue and case hardening purposes. Every packer having to dispose of his bone whether Green, Raw, or Junk and Steamed bone, will do well to get in touch with Williams.

Williams machines are also suitable for Tankage, Cracklings, Beef Scrap, Oyster and Clam Shells, and any other material found around the packing plant requiring crushing or grinding.

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WHOLESALE FRESH MEATS.

Carcass Beef.

Prime native steers.....	26	@28 1/4
Good native steers.....	24	@26
Medium steers.....	20	@22 1/2
Holsteins, good.....	20	@22 1/2
Cows.....	11 1/2	@15
Head quarters, choice.....	38	@38 1/2
Fore quarters, choice.....	38	@38 1/2

Beef Cuts.

Steer Loin, No. 1.....	53	@53
Steer Loin, No. 2.....	51	@51
Steer Short Loin, No. 1.....	48	@48
Steer Short Loin, No. 2.....	46	@46
Steer Loin Ends (hips).....	40	@40
Steer Loin Ends, No. 2.....	38	@38
Cow Loin.....	23	@23
Cow Short Loin.....	25	@25
Cow Loin Ends (hips).....	39	@39
Steer Ribs, No. 1.....	39	@39
Steer Ribs, No. 2.....	35	@35
Cow Ribs, No. 1.....	25	@25
Cow Ribs, No. 2.....	23	@23
Cow Ribs, No. 3.....	23	@23
Steer Ribs, No. 1.....	24	@24
Steer Ribs, No. 2.....	23	@23
Steer Chucks, No. 1.....	18	@18
Steer Chucks, No. 2.....	16	@16
Cow Chucks.....	15	@15
Steer Plates.....	12 1/2	@12 1/2
Medium Plates.....	10 1/2	@10 1/2
Briskets, No. 1.....	18	@18
Briskets, No. 2.....	16	@16
Steer Navel Ends.....	11	@11
Cow Navel Ends.....	7 1/2	@7 1/2
Fore Shanks.....	7	@7
Hind Shanks.....	6	@6
Strip Loin, No. 1.....	30	@30
Strip Loin, No. 2.....	25	@25
Strip Loin, No. 3.....	23	@23
Strip Loin, No. 4.....	21	@21
Strip Loin, No. 5.....	19	@19
Strip Loin, No. 6.....	17	@17
Strip Loin, No. 7.....	15	@15
Strip Loin, No. 8.....	13	@13
Strip Loin, No. 9.....	11	@11
Strip Loin, No. 10.....	9	@9
Strip Loin, No. 11.....	7	@7
Strip Loin, No. 12.....	5	@5
Strip Loin, No. 13.....	3	@3
Strip Loin, No. 14.....	1	@1
Strip Loin, No. 15.....	0	@0
Strip Loin, No. 16.....	0	@0
Strip Loin, No. 17.....	0	@0
Strip Loin, No. 18.....	0	@0
Strip Loin, No. 19.....	0	@0
Strip Loin, No. 20.....	0	@0
Strip Loin, No. 21.....	0	@0
Strip Loin, No. 22.....	0	@0
Strip Loin, No. 23.....	0	@0
Strip Loin, No. 24.....	0	@0
Strip Loin, No. 25.....	0	@0
Strip Loin, No. 26.....	0	@0
Strip Loin, No. 27.....	0	@0
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Strip Loin, No. 92.....	0	@0
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Strip Loin, No. 96.....	0	@0
Strip Loin, No. 97.....	0	@0
Strip Loin, No. 98.....	0	@0
Strip Loin, No. 99.....	0	@0
Strip Loin, No. 100.....	0	@0

Beef Product.

Brains, per lb.....	13	@14
Heart, per lb.....	8	@9
Sweetbreads.....	59	@62
Ox-Tail, per lb.....	10	@11
Frank Tripe, plain.....	10 1/2	@11 1/2
Frank Tripe, H. C.....	11 1/2	@12 1/2
Livers.....	11 1/2	@12 1/2
Kidneys, per lb.....	8 1/2	@9

Veal.

Choice Carcass.....	27	@27
Good Carcass.....	25	@25
Good Saddle.....	36	@37
Good Backs.....	20	@20
Medium Backs.....	10	@10

Veal Product.

Brains, each.....	13	@14
Sweetbreads.....	59	@62
Calif Livers.....	32	@38

Lamb.

Choice Lambs.....	26	@26
Choice Saddle.....	32	@32
Choice Fores.....	18	@18
Medium Lambs.....	24	@24
Medium Fores.....	20	@20
Medium Saddle.....	20	@20
Lamb Fries, per lb.....	22	@22
Lamb Tongues, each.....	21	@21
Lamb Kidneys, per lb.....	25	@28

Mutton

Heavy Sheep.....	11	@11
Light Sheep.....	13	@13
Heavy Saddle.....	14	@14
Light Saddle.....	18	@18
Heavy Fores.....	8	@8
Light Fores.....	10	@10
Mutton Legs.....	18	@18
Mutton Loin.....	17	@17
Mutton Stew.....	8	@8
Sheep Tongues, each.....	15	@15
Sheep Heads, each.....	15	@15

Fresh Pork, Etc.

Dressed Hogs.....	41	@41
Pork Loin.....	23 1/2	@23 1/2
Leaf Lard.....	23 1/2	@23 1/2
Tenderloins.....	20	@20
Spare Ribs.....	20	@20
Butts.....	20	@20
Hocks.....	20	@20
Trimming.....	24	@24
Extra Lean Trimming.....	16	@16
Tails.....	9	@9
Snouts.....	5	@5
Pigs' Feet.....	5	@5
Pigs' Heads.....	10	@10
Blade Bones.....	9	@9
Cheek Meat.....	16	@16
Hog Livers, per lb.....	6	@7
Neck Bones.....	5	@6
Skinned Shoulders.....	28	@28
Pork Hearts.....	8 1/2	@8 1/2
Pork Kidneys, per lb.....	24	@24
Pork Tongues.....	9	@9
Ham Bones.....	10	@10
Ham Fat.....	15	@15
Back Fat.....	21	@21
Ham.....	22	@22
Calas.....	22	@22
Butts.....	38	@38

SAUSAGE.

Columbia, Cloth, Bologna.....	18 1/4	@18 1/4
Bologna, large, long, round, in casings.....	18 1/4	@18 1/4
Choice Bologna.....	18 1/4	@18 1/4

Frankfurters.....	26 1/4	@26 1/4
Liver Sausage, with beef and pork.....	22 1/2	@22 1/2
Tongue and blood sausage, with pork.....	21 1/2	@21 1/2
Minced Sausage.....	21	@21
New England Style Sandwich Sausage.....	21	@21
Prepared Luncheon Sausage.....	25	@25
Liberty Luncheon Sausage (Berliner).....	25	@25
Oxford Lean Butts.....	44 1/2	@44 1/2
Polish Sausage.....	19 1/2	@19 1/2
Garlic Sausage.....	22 1/2	@22 1/2
Country Smoked Sausage.....	22 1/2	@22 1/2
Country Fresh Sausage.....	26	@26
Pork Sausage, bulk or link.....	22	@22
Pork Sausage, short link.....	22	@22
Luncheon Roll.....	21 1/2	@21 1/2
Delicatessen Loaf.....	57 1/2	@57 1/2
Ox Tongues, jellyed.....	22 1/2	@22 1/2
Macaroni and Cheese Loaf.....	68	@68
Loin Roll, cooked.....	68	@68

Summer Sausage.

D'Aries, new goods.....	50	@50
Beef casing Salami, best.....	52	@52
Italian Salami (new goods).....	52	@52
Capri.....	53	@53
Holsteiner.....	45	@45
Pepperton, long links.....	42	@42
Farmer.....	42	@42

Sausage in Brine.

Bologna, kits.....	2.40	@2.40
Bologna, 1/2 @ 1/2.....	4.00	@4.00
Pork, link, kits.....	2.76	@2.76
Pork, links, 1/2 @ 1/2.....	4.80	@4.80
Polish Sausage, kits.....	2.46	@2.46
Polish Sausage, 1/2 @ 1/2.....	4.18	@4.18
Frankfurters, kits.....	3.00	@3.00
Frankfurters, 1/2 @ 1/2.....	5.00	@5.00
Blood Sausage, kits.....	3.35	@3.35
Blood Sausage, 1/2 @ 1/2.....	5.50	@5.50
Liver Sausage, kits.....	3.30	@3.30
Liver Sausage, 1/2 @ 1/2.....	3.30	@3.30
Head Cheese, kits.....	2.40	@2.40
Head Cheese, 1/2 @ 1/2.....	4.00	@4.00

VINEGAR PICKLED GOODS.

Pickled Pigs' Feet, in 200-lb. barrels.....	10.00	@10.00
Pickled Plain Tripe, in 200-lb. barrels.....	17.50	@17.50
Regular H. C. Tripe, in 200-lb. barrels.....	19.25	@19.25
Pocket H. C. Tripe, in 200-lb. barrels.....	21.00	@21.00
Pickled hog chitterlings, uncooked, bbls.....	22.25	@22.25
Pickled hog chitterlings, cooked, bbls.....	22.50	@22.50
Sheep Tongues, short cut, barrels.....	70.00	@70.00
Sheep Tongues, long cut, barrels.....	57.00	@57.00
Pork Tongues, barrels.....	68.50	@68.50

CANNED MEATS.

	No. 1/2	No. 1	No. 2	Per doz.
Corned beef.....	\$3.40	\$6.50	\$21.50	
Roast beef.....	3.40	6.50	21.50	
Roast mutton.....	3.40	6.50	21.50	
Sliced dried beef.....	2.75	4.85	8.90	52.00
Ox tongue, whole.....	21.00	66.00		
Luncheon tongue.....	3.50	6.00	10.75	38.50
Corn beef hash.....	1.90	3.25	6.00	
Roast beef hash.....	1.90	3.25	6.00	
Hamburger steak with onions.....	1.90	3.25	6.75	
Vienna style sausage.....	1.35	2.75	5.25	
Luncheon sausage.....	1.40			
Breakfast sausage.....	2.75	4.50		
Veal loaf, med. size.....			2.80	

EXTRACT OF BEEF.

	Per doz.
2-oz. jars, 1 doz. in case.....	\$ 8.50
4-oz. jars, 1 doz. in case.....	6.75
8-oz. jars, 1/2 doz. in case.....	12.00
16-oz. jars, 1/4 doz. in case.....	21.00

BARRELLED BEEF AND PORK.

Extra Plate Beef, 200-lb. barrels.....	28.00	@28.00
Plate Beef.....	28.00	@28.00
Rollettes.....	29.00	@29.00
Rump Butts.....	31.00	@31.00
Mess Pork.....	35.00	@35.00
Clear Fat Backs.....	43.50	@43.50
Family Back Pork.....	50.00	@50.00
Bean Pork.....	35.00	@35.00

LARD.

Pure Lard, kettle rendered, per lb., tes.....	29 1/4	@29 1/4
Pure Lard.....	24 1/2	@24 1/2
Cooking oil, per gal., in barrels.....	18 1/2	@18 1/2
Exters' special cooking oil.....	18 1/2	@18 1/2
Barrels, 1/2 over tierces, half barrels, 1/4 over tierces; tubs and pails, 10 to 80 lbs., 1/4 c. to 1 c. over tierces.....	18 1/2	@18 1/2

BUTTERINE.

1 to 2, natural color, solids, f. o. b. Chicago.....	31	@31
Cartons, rolls or prints, 1 lb.....	32	@32
Cartons, rolls or prints, 2 @ 5 lbs.....	31 1/2	@31 1/2
Shortenings, 30 @ 60 lb. tubs.....	24	@24
Nut Margarine, prints, 1 lb.....	28	@28

DRY SALT MEATS.

Clear Bellies, 12 @ 14 avg.....	26.75	@26.75
Clear Bellies, 14 @ 16 avg.....	26.50	@26.50
Clear Bellies, 18 @ 20 avg.....	25.25	@25.25
Rib Bellies, 12 @ 14 avg.....	26.75	@26.75
Rib Bellies, 14 @ 16 avg.....	24.50	@24.50
Fat Backs, 10 @ 12 avg.....	20.00	@20.00
Fat Backs, 12 @ 14 avg.....	20.50	@20.50
Fat Backs, 14 @ 16 avg.....	21.00	@21.00
Extra Short Clears.....	21.50	@21.50
Extra Short Ribs.....	21.50	@21.50
Short Clears.....	22.00	@22.00
Butts.....	17.25	@17.25

WHOLESALE SMOKED MEATS

WHOLESALE SMOKED MEATS		
Skinned Hams		@42
Regular Hams	38 1/2	@41 1/2
Calas, 4 @ 12 lbs. avg.		@26
Calas, 6 @ 12 lbs. avg.		@26
New York Shoulders	8 @ 12 avg.	@27 1/2
Breakfast Bacon, fancy		@49
Rib Bacon, wide, 8 @ 12 avg., and strip, 4 @ 8 avg.		@29 1/2
Wide, 12 @ 14 avg., and strip, 6 @ 7 avg.		@30 1/2
Wide, 4 @ 6 avg., and strip, 3 @ 4 avg.		@35 1/4
Dried Beef Inside		@61 1/4
Dried Beef Knuckles		@61 1/4
Dried Beef Outsoles		@48 1/4
Dried Beef Seta, best		@46 1/4
Skinned Rolled Hams		@40

Retail Section

THE BUSINESS QUIZ

Question No. 1.—What is the object of Inventory and how often should it take place in a well ordered business?

Question No. 2.—How should profits be figured. On cost, or selling price and why?

Question No. 3.—If an article cost \$1, and you sell for \$1.50, what percentage of profit do you make, minus "overhead"?

Question No. 4.—If overhead expense is 20 per cent, what will an article that cost \$1 and which you sell for \$1.50, figure as profit?

Question No. 5.—How do you figure depreciation on fixtures, and on what basis do you compute figures to be on the safe side?

Question No. 6.—What is known as the "unknown" expense element in computing costs and percentage of profit?

Answers to the above will appear in the next issue of the National Provisioner.

ANOTHER BIG PUBLIC MARKET.

Arena Gardens, Detroit's northend coliseum for grand opera, automobile shows, skating and dancing, is being remodeled into a great public market. The enormous building at 1253 Woodward Avenue, and the ice plant at the rear on Cass Avenue, are in the hands of workmen. When completed, there will be opened the Cass-Woodward market, with 70,000 square feet of floor space, accommodating 80 stalls on the main floor and 30 shops on the second floor.

The property is owned by the General Necessities Corporation, of Detroit, and has been leased to the newly organized Detroit Markets Corporation, officers of which are: President, David A. Brown; vice-president, John A. Russell; secretary, treasurer and business manager, William E. Wreford. The latter corporation has obtained a 30-year lease on the building and grounds and no expense is being spared on the remodeling of this building, which is said by experts to be well adapted to marketing purposes. It is hoped to open the market about the middle of November.

Plans were so made that there can be no congestion in aisles at any spot; no pillars supporting the superstructures come in any aisles; each stall where foods are to be sold will have its own refrigeration unit, beside a system of cold storage at the rear of the market, and dry storage on the second floor; forced ventilation will keep the air clean, and an exceptional lighting system will make the place bright.

The building will be absolutely fireproof and sanitary. Cement, brick, steel, tile are being used for construction. Every counter will be enclosed in glass. The market will be almost three times as large as the largest now established in Detroit, and there will be stalls handling groceries, fresh vegetables, delicatessen, baked

goods, sea foods, dairy products, meats, drugs and a restaurant. There will be also a bank on the main floor.

The second floor will be unique in its planning. There will be a lane down the middle of the building 58 feet wide. Shops with glass fronts will be on either side after the style of a modern arcade. Here will be hair dressing parlors, tea rooms, women's shops of all kinds, rest and children's rooms, elevator service will be provided as well as unlimited parking facilities for automobiles close to the Cass Avenue entrance.

The present ice plant at the rear will be remodeled to furnish refrigeration and general office space. An archway entrance is being constructed at Cass avenue and the Woodward avenue frontage is being remodeled.

LOCAL AND PERSONAL.

George Thomas has opened a meat market in Edison, O.

Wiley & Son have opened a meat market in Marseilles, Ill.

Will Pickett has purchased a meat market at Baldwin, Ia.

Emil Hanson will open a meat market in Ambrose, N. D.

L. A. Nickerson has opened a meat market in Harbine, Nebr.

John Svennumson has opened a meat market in Portal, N. D.

John Pitz has discontinued his meat business in Manitowoc, Wis.

David W. Williams has opened a meat market in Hagerstown, Md.

John Grote has leased the Marchand meat market, Hickman, Nebr.

Misner & Lessman have engaged in the meat business at Denbar, Nebr.

A new meat market has been opened in Coachilla, Cal., by R. J. Foster.

The butchers of Petaluma, Cal., have organized a local board of trade.

George Goolsby has sold his meat market in Verdon, Nebr., to D. D. Hontz.

Claude Nichols has purchased the City Meat Market at Claremore, Okla.

Shaw & Son have sold their meat market in Alliance, O., to D. H. McCredie.

J. L. Camp has engaged in the meat and grocery business at Jennings, Okla.

The E. E. Grams meat market at Echo, Minn., has been sold to Theo. Grams.

Matthew Fleischmann has purchased the Sanitary Meat Market at Reading, Pa.

The meat market of H. A. Jasper, Rock Island, Ill., was recently robbed of \$400.

The Liberty Meat Market was recently opened for business in Chambersburg, Pa.

Armstrong & Wilcox have bought the Bush Brothers meat market at Mason City, Ia.

Grover Lenon has sold his meat market in Wilcox, Nebr., to G. W. Crouse, of Huntley.

The W. H. Coughlin meat market, Fond du Lac, Wis., has been sold to Frank Loshinske.

James Thompson has purchased the Liberty Market, Corona, Cal., from I. M. Rowland.

John Dana has sold his meat market in San Anselmo, Cal., to J. F. Schattgen of Vallejo.

The Jones Cash Market at North Bend, Ore., has combined with the Bay City Market.

Earl Baldwin is erecting a building in Eugene, Ore., in which he will open a meat market.

The meat market of F. W. Ehlers in Davenport, Ia., has been sold to A. O. Rasmussen.

Wm. Bunn has disposed of the City Meat Market, Nelson, Nebr., to Lockard & Wade.

M. M. Cahill has purchased the Boston Meat Market, Guthrie, Okla., from G. M. Frazier.

Rook Bros. meat market and grocery, New Sharon, Ia., has been sold to Taylor & Black.

W. A. Shaw & Company have opened a meat market and grocery in Crawfordsville, Ind.

Morris Larsen, of Minden, has purchased the butcher shop of Jay Harlan at Campbell, Nebr.

The Baird & Puckitt meat market at Grand Island, Nebr., has been sold to Wm. Krehmke.

W. W. Livingston, Haynes, N. D., has sold his meat market to his brother, G. J. Livingston.

Carl Gartner has installed a meat department in his delicatessen store at Shelbyville, Ind.

The Denison Meat Market has been opened in Indianapolis, Ind., by L. Arnson of Frankfort.

The Newton & Carroll meat market, Beloit, Wis., has been sold to Edward Scheibel & Son.

John Bower, Sr., has taken over the meat department of the F. D. Kessler store at Sunbury, Pa.

Howard E. Seyfried has sold his meat market in Nazareth, Pa., to Godshalk Bros. of Philadelphia.

H. P. Strom's meat market at Medella, Minn., has been purchased by Henry Lunde and Hugh McVay.

A. B. Powell has purchased the City Packing House Market, Lawrence, Kans., from C. M. Frazier.

The Farmers Meat & Produce Co. has been incorporated at Chesaning, Mich., with a capital of \$30,000.

John Sprich & Sons will open one of their "White House" meat markets in Atchison, Kans., in about a week.

Henry Herman and Henry Kline have purchased the Hoosier Meat Market at Spearville, Kans., from Glenn H. Stinson.

John Sellers, a butcher in Hollidaysburg, Pa., has retired and is succeeded by his sons, Harvey and Earle, who will now conduct the Quality Meat Market.

A. H. Van Harten has taken over the retail meat business of the Caldwell Hoekzema Co., Grandville, Mich. R. A. Caldwell took over the wholesale meat department.

A. A. Herbst will open a meat market in Mellen, Wis.

George Clark's meat market and restaurant, McFarland, Wis., has been sold to Everest Rollis.

W. C. Stone has opened a meat market in connection with his grocery business at Chillicothe, Mo.

The meat market of R. A. Montgomery in Fowler, Ind., has been purchased by Grover Stillabower.

A new meat market will soon be opened in Watertown, Wis., by the New York Market Company, of Racine.

James Meyers, of the Thomas & Meyers meat market at Versailles, Mo., has bought the interest of his partner, Mr. Thomas.

The United Packing Company of Stock-

ton, Cal., has opened a market which will handle meats, provisions, fruits and vegetables.

The grocery and meat market of Emmet Miller, at Corsicana, Tex., has been destroyed by fire. The insurance carried amounts to \$1,000.

The grocery and meat market of Boggess Bros. at Elwood, Ind., has been purchased by the J. George & Mesalam Company. The stock will be removed to other locations and disposed of.

The retail meat dealers of Milwaukee, Wis., have launched a campaign to encourage the closing of meat shops on Sunday.

Construction has begun on a new building in Bremerton, Wash., which will house the Fourth Street Public Market.



Libby's

LIBBY'S nationwide advertising is inducing many women to try Libby's Meats. Libby quality makes them steady "repeat" customers.

Libby, McNeill & Libby
Chicago



rib and loin trade for hotels and restaurants. When the supply of this class of cattle falls below trade requirements, live prices naturally advance. Similarly, when the supply is in excess of trade requirements, prices of this class of cattle decline.

MUTTON AND LAMB.

The sheep and lamb trade has been fair, on the whole, with prices generally steady for range lambs. Comparatively large receipts of native lambs at markets east of Chicago has tended to depress prices somewhat. This situation became quite marked the last week of September.

The quality of range lambs this season has been better than a year ago, principally because grazing conditions on the range have been more favorable.

The wool situation is somewhat parallel to the situation of hides, fats and by-products in the beef trade. The wool market has been dull, the demand being less than the current production. Within the last year, wool has shown a decline of approximately 50 per cent, and pickled skins, which are used for making shoes and gloves, have declined about the same.

Meat and Livestock Situation in September

In a review of the meat and livestock situation as it existed during the month of September, the Institute of American Meat Packers discusses the situation as follows:

PORK.

A good demand for pork products, both at home and abroad, has been the outstanding feature of the livestock and meat situation during September. This demand, however, has varied greatly with respect to the various cuts. Packers report that a few choice cuts—cuts that constitute only a small portion of the hog, that are most scarce, and that are relatively higher priced—have been in much demand while a large part of the dressed animal has been selling at wholesale for less than the dressed carcass cost per pound.

Foreign Trade.

The export demand from continental ports, and especially from Germany, for pork products is regarded in some quarters as the best during any month of the current year. Germany has been buying lard and boxed meats. Holland also has been buying substantial quantities of lard. The British, who seem to be buying sparingly, have confined their orders chiefly to hams. How much longer they will stay out of the market is problematical. It is believed by some that they are trying to clear the decks of practically everything before they renew purchasing in volume.

It is reported that the stocks of pork products which the British Government previously bought and stored in this country are being moved in moderate quantities as needed to supplement the home production and imports from countries other than the United States. Opinions differ as to how long these stocks will suffice, some taking the view that they will not be exhausted before December.

Domestic Trade.

There have been reduced receipts of light hogs and a large run of heavy hogs. The demand for light loins and other light choice cuts has created a brisk market for light-weight hogs, and an extreme spread in value between heavy and light packing hogs. On September 20, hogs at the Chicago market reached a top price of \$18.30, the highest since the corresponding day a year ago.

There has been a good seasonal demand throughout the country for fresh pork products. Cured products also have been meeting with a ready sale. The demand for hams has been good and the supply has been consumed about as fast as cured. The Southern trade has increased, following the marketing of the cotton crop.

The South apparently is undergoing another change of taste so far as the consumption of cured meats is concerned. During the last two years, and especially during the war, when Europe was buying large quantities of dry salt meats, sugar-cured products largely replaced dry salt meats in the South. The difference in price was small and the trade which normally purchases the dry salt meats bought the higher-priced, sugar-cured products. With the falling off of the export demand,

the spread between dry salt and sugar-cured meats was widened, the former product having declined. As a consequence, the Southern trade is again turning to the dry salt meats.

A shortage of light pork loins has been an odd feature of the domestic trade. Consumers, seeking the maximum number of pork chops per pound, have demanded chops from lighter loins and neglected the heavier cuts, despite the fact that chops from the heavier loins, although fewer in number to the pound, are equally as nutritious and palatable, and considerably lower in price. This preference for smaller chops, coupled with the reduction in receipts in light hogs, created an actual shortage of the sort of pork loins which consumers wanted. Heavy loins, in consequence, have been selling very cheaply as compared with lighter loins. The difference in price between loins and fresh pork shoulders, which compare favorably with loins both in fuel value and in taste, has narrowed somewhat, but is still such that the consumer can save money by purchasing the less expensive shoulders.

By some the decline in grains and the prospect of unusually good crops, especially of corn, are interpreted as factors calculated to increase the future production of swine and pork. On the other hand, there is some speculation as to how far the increase in production occasioned by lower grain prices will be counteracted by the fact that some producers previously have restricted their feeding operations somewhat.

BEEF.

There was a fairly steady trade for beef during the first three weeks of the month, but the close was extremely unsatisfactory. The demand for hides and other by-products has continued negligible. On account of this lack of demand, the current production of hides cannot be disposed of as fast as they are taken off. The same is true of fats, although they have shown improvement. Prices of hides and other by-products show marked decreases in value as compared with a year ago, many grades of hides having declined as much as 50 per cent in value.

The difference in price between beef from corn-fed cattle and beef from medium and lower grades of steers and cows has increased. The price of the choice beef has been strong, while the price of the medium grade has shown some decline.

The live price of fancy yearlings and of choice corn-fed steers of good weight has been strong.

The situation this fall is about the same as it has been other years at this season. The spread between choice corn fed steers and the medium or common class of cattle becomes wider each week because of the scarcity at this season of the long-fed, finished cattle. Experienced livestock producers and feeders understand that recently there has been a good demand and a small supply of finished cattle.

There is a reasonably steady demand for a fair supply of choice, good-weight steers and choice yearlings to supply the

New York Section

T. E. Ray, of the branch house department, Chicago, was a welcome visitor at Swift headquarters in New York this week.

An unusual number of Armour branch house managers from outlying points had business in New York this week. There was also a world's series at the other end of Brooklyn bridge.

Prices realized on Swift & Company's sales of carcass beef in New York City, for the week ending Saturday, October 2, 1920, on shipments sold out, ranged from 13 cents to 24 cents per pound and averaged 17.72 cents per pound.

Three representatives of the French government inspecting meat and cold storage establishments in this country were in New York this week, and made a special inspection of the Wilson & Company plant on First avenue.

President Thomas E. Wilson of Wilson & Company was in the city this week on his return from Boston, where he delivered the principal address before the Investment Bankers' Association national meeting. Vice-President J. Moog was also in the city, as were superintendents Williams of the Chicago plant and Hicks of the Kansas City plant.

The following is a report of the New York City Health Department of the number of pounds of meat, poultry and game seized and destroyed in the city of New York during the week ending October 2, 1920: Meat—Manhattan, 4,051 lbs.; Brooklyn, 188 lbs.; Bronx, 223 lbs.; Richmond, 1600 lbs.; total, 6,062 lbs. Poultry and game—Manhattan, 7,415 lbs.

Mr. A. H. Benjamin, sole American representative of the Sansinena Company of Buenos Aires, Argentina, with offices at 24 State street, New York City, returned to America on Monday on the Imperator, after a two months' European trip, during which time he visited Norway, Sweden, Denmark, Great Britain, France and Belgium in the interests of his company, which has connections in almost every country in the world. Mr. Benjamin is as well known abroad as he is in this country.

Mr. C. E. Grim, who is the American representative of B. Stilling-Andersen, Inc., with offices in the Woolworth building, has recently returned from a four months' European trip which took in Great Britain, Norway, Sweden, Denmark, Germany, Poland and Finland, in the interests of his firm. Mr. Grim is unusually well informed in the packinghouse world, and knows the business from every angle. His adventures while abroad would make interesting reading, as he traveled through some of the countries at war and where strangers are looked upon with suspicion. But packinghouse training and his own natural wit have made him equal to any foreign diplomat or ambassador, so he came through with flying colors and unscathed—a bit

hungry at times, but as he says, "that's all in the game."

One of the enthusiastic members of the Institute of American Meat Packers is Sam Slotkin, president of the Hygrade Provision Company, Inc., of Brooklyn. Mr. Slotkin took in the Atlantic City convention, and what he saw and heard there made him as strong a booster for the organization as he has been for his own business, which is saying a good deal. Messrs. Slotkin and Aaronson started the Hygrade Provision Company in 1914, and in the few years since have brought this company to the front in its line in this territory. Both men knew the sausage business from the ground up, and by adopting and adhering to a policy of square dealing and high quality they have made their concern what it is. They are proud that every detail of their business is handled by experts, but it is "dealing absolutely on the square" that Mr. Slotkin likes to talk most about as being the keynote of business success.

NATIONAL SAFETY CONGRESS.

At the Ninth Annual Safety Congress, held in Milwaukee, Wis., September 27 to October 1, the following officers of the National Safety Council were elected: President, Charles P. Tolman, Chief Engineer and Chairman of the Manufacturing Committee of the National Lead Company; first vice president, W. H. Cameron, Secretary-Treasurer of the Workmen's Compensation Service Bureau; second vice president, L. A. DeBois, manager of the safety section of E. I. DuPont de Nemours Company, Wilmington, Del.; third vice president, W. E. Worth, assistant manager of the Industrial Relations Department of the International Harvester Company, Chicago; fourth vice president, John A. Oartel, safety engineer of the Carnegie Steel Company.

The following officers were re-elected: C. W. Price, Secretary; W. H. Frater, Treasurer; R. T. Solensten, Assistant Secretary.

The registration at the meetings totaled 3,100, indicating that the actual attendance probably reached 5,000.

CHEMICALS AND SOAP SUPPLIES.

(Special Report to The National Provisioner.)

New York, Oct. 5, 1920.—Latest quotations on chemicals and soapmakers' supplies are as follows: 74 to 76% caustic soda, 4½¢@5c lb.; 60% caustic soda, 4½¢ lb.; 98% powdered caustic soda, 5¢@5½¢ lb.; 48% carbonate of soda, 3¢@3¼¢ lb.; 58% carbonate of soda, 2½¢@3c lb.; talc, 1½¢@2c lb.; sillex, \$20 per 2,000 lbs.

Clarified palm oil in casks of 2,000 lbs., nominal, 11¢@11½¢ lb.; yellow olive oil, \$3@3.25 gal.; Cochín coconut oil, 17½¢@18c lb.; Ceylon coconut oil, 17c lb.; cottonseed oil, 13¢@14c lb.; soybean oil, 13½¢@14c lb.; corn oil, 12½¢@13c lb.; peanut oil in bbls., deodorized, 17¢@17½¢ lb.; crude, 15c lb.

Prime city tallow, special, nominal, 9½¢ lb.; dynamite glycerine, nominal, 27c lb.; saponified glycerine, 88%, nominal, 19¢@19½¢ lb.; crude soap glycerine, nominal, 17c lb.; chemically pure glycerine, nominal, 28½¢@30c lb.; prime packers' grease, nominal, 8¢@8½¢ lb.

WHOLESALE DRESSED MEAT PRICES.

Wholesale prices of Western dressed fresh meats were quoted by the U. S. Bureau of Markets at Chicago and three Eastern markets on Thursday, October 7, 1920, as follows:

	Chicago.	Boston.	New York.	Philadelphia.
Fresh Beef:				
STEERS—				
Choice	\$27.00@28.00	\$27.00@28.00	\$27.00@29.00	\$27.00@29.00
Good	22.00@25.00	24.00@26.50	21.00@25.00	22.00@26.00
Medium	17.00@20.00	18.00@22.00	17.00@20.00	18.00@22.00
Common	13.00@16.00	16.00@17.00	15.00@16.00	13.00@14.00
COWS—				
Good	16.00@17.00	14.00@15.00	15.00@16.00	14.00@15.00
Medium	14.00@15.00	13.00@14.00	13.50@14.00	14.00@15.00
Common	11.00@13.00	13.00@14.00	12.50@13.00	11.00@14.00
BULLS—				
Common	10.25@10.75	10.50@11.50	10.50@11.50	10.00@12.00
Fresh Veal:*				
Choice	24.00@25.00	28.00@30.00	21.00@23.00	21.00@23.00
Good	22.00@23.00	18.00@20.00	18.00@20.00	16.00@19.00
Medium	18.00@20.00	14.00@15.00	14.00@16.00	13.00@15.00
Common	12.00@15.00	12.00@13.00	12.00@13.00	12.00@13.00
Fresh Lamb and Mutton:				
LAMB—				
Choice	\$5.00@26.00	26.00@27.00	26.00@27.00	26.00@29.00
Good	23.00@24.00	24.00@25.00	24.00@25.00	25.00@27.00
Medium	21.00@22.00	20.00@23.00	20.00@23.00	24.00@25.00
Common	18.00@20.00	18.00@20.00	15.00@18.00	20.00@23.00
YEARLINGS—				
Good	19.00@20.00	18.00@22.00	18.00@21.00	20.00@22.00
Medium	17.00@18.00	16.00@18.00	15.00@18.00	18.00@20.00
Common	15.00@16.00	14.00@15.00	14.00@15.00	16.00@18.00
MUTTON—				
Good	11.00@12.00	12.00@13.00	12.00@13.00	14.00@15.00
Medium	9.00@10.00	8.00@10.00	8.00@11.00	10.00@13.00
Common	8.00@9.00	8.00@10.00	8.00@11.00	10.00@13.00
Fresh Pork Cuts:				
LOINS—				
8-10 lb. average	40.00@41.00	42.00@43.00	42.00@44.00	39.00@41.00
10-12 lb. average	38.00@39.00	40.00@41.00	41.00@42.00	38.00@40.00
12-14 lb. average	36.00@37.00	38.00@40.00	39.00@41.00	37.00@38.00
14 lb. over	34.00@35.00	32.00@37.00	35.00@37.00	30.00@37.00
SHOULDERS—				
Skinned	26.00@27.00	27.00@29.00	27.00@29.00	25.00@28.00
PICNICS—				
4-6 lb. average	22.00@23.00	24.00@25.00	23.00@24.00	24.00@25.00
6-8 lb. average	21.00@22.00	23.00@24.00	22.00@23.00	22.00@23.00
8 lb. over	19.00@20.00	22.00@23.00	22.00@23.00	22.00@23.00
BUTTS—				
Boneless	32.00@34.00	32.00@34.00	32.00@34.00	30.00@34.00
Boston style	32.00@34.00	32.00@34.00	32.00@34.00	30.00@34.00

*Veal prices include "hide on" at Chicago and New York.

MEAT PACKERS' SAFETY COUNCIL.

(Continued from page 19.)

by Mr. McClellan's company because men are better satisfied and do their work much more efficiently. Instruction is given by the foremen and old employees. Accidents by ignorance are very materially reduced.

J. S. Marks, of the Security Mutual Casualty Company, was unable to be present to read his paper on "Preventing Stub Knife Cuts." This was regrettable, due to the fact that Mr. Marks was in possession of interesting statistics of knife cuts. He had, however, secured about fifteen samples of knife guards from the South St. Joseph, Mo., plant of Swift & Company and had sent them to this session. H. M. Sandel, safety engineer of Swift & Company, substituted for Mr. Marks, explained the various operations and advantages of these guards and passed them around to the men assembled.

It was the experience of Swift & Company that many of the men would not use these knife handles, due to the fact that they had a natural aversion to the use of guards of any kind. That company has found that by designating or naming such things as knife handles, better co-operation with the men is secured. The record of the plant which sent the knives has been 100 per cent of these handles in operation for some period, but supervision is necessary to maintain such an excellent situation.

G. E. Sanford, General Electric Company, West Lynn, Mass., gave a very interesting talk, assisted by stereopticon views, on "Fire Drills and Fire Alarms." Mr. Sanford gave very helpful suggestions as to the importance of fire drills and of the necessity of testing hose under pressure. In answer to questions, Mr. Sanford stated that non-interfering alarm boxes were used exclusively, that the lighting circuits for exits were the same as the lighting circuits for floors, and that whenever a fire drill is called the current for the power is shut

off, but the current for the lights and elevators is not.

The paper on "Burns and Scalds," presented by Henry K. Batchelder of the A. C. Lawrence Leather Company, was very interesting. Mr. Batchelder stated that education of employees is the preventive measure for reducing the number of burns and scalds from all causes in their plants. Proper clothing is one feature which should be carefully watched, and the use of an acid pump is more desirable than a carbonyl inclinator.

Physical Examination and Rebuilding Men.

The third session, on October 1st, at 9:30 a. m., opened with presentation of a paper by A. A. Bureau of Morris & Company on the subject of "Value of Physical Examination and Reconstruction." Mr. Bureau thoroughly covered the subject, and gave many phases of possibilities in corrective remedies for physical defects. The discussion showed the interest of the members assembled in requests for detailed information as to the extent and thoroughness of the examination. This is not a hard and fast rule with Morris & Company, for the physician gauges the necessary thoroughness of an examination by symptoms revealed during the conduct of the examination.

The information regarding the physical examination is used for insurance purposes, but aside from that no one except the man examined and the doctor knows any of the details. It was thought advisable that the foreman be advised of the physical condition of the man, but the extent of the information given the foreman should be very general, so as to be a guide to him as to what kind of work the foreman should put the man to, rather than to reveal the man's physical condition. The foreman should be included in the examination of the man.

F. H. Squires, of the White Motor Car Company, gave a very interesting talk on

"Motor Truck Accidents." Mr. Squires was kept working overtime answering questions relative to his subject.

There is no real honest-to-goodness non-skid truck tire on the market, he said. Because of that the drivers of trucks should learn to control their machines by using both brakes and motor. Oftentimes an accident can be avoided by purposely skidding a car or truck, but running slowly with brakes in good condition and blowing the horn whenever there is the slightest excuse for doing so is much to be preferred.

Truck drivers generally do not blow their horn frequently enough, and the tendency is to neglect to use the horn as they gain a longer experience. A truck driver will often be involved in accidents that are not his own fault, and where it can be said that all the "breaks" are against him. One member present mentioned that such a driver was discharged by his company.

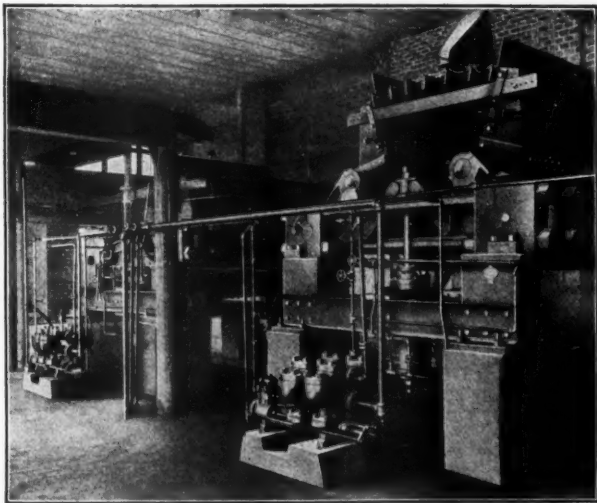
The concluding paper of the session was read by J. M. Sandel of Swift & Company on the subject, "Value of Comparative Accident Statistics." One point mentioned was that any sort of information can be foretold if the past statistical records are complete. Mr. Bonsib of the Tanners Council, New York, told of an actual occurrence of that kind where the past experience was available and a curve for the future plotted from it. The accident frequency followed that curve as the time went on. Everyone present agreed that minor injuries should be reported promptly.

Officers of the Meat Packers and Tanners' Section were elected for the ensuing year as follows:

Chairman—A. B. Drummond, Wilson & Company, Chicago.

Vice-chairman—Henry K. Batchelder, A. C. Lawrence Leather Company.

Secretary—W. J. McClellan, Armour & Company, Chicago.



Each Worthington Filter Press saves from \$3000 to \$4000 each year in cloth alone.

In addition to saving at least \$3000 the year by eliminating the use of cloth for packaging the material to be pressed, Worthington Filter Press saves on labor costs and effects a very considerable power saving.

One man can operate one press, or two men can operate four presses. Material is fed into the press from a chute, cheese is formed in press and falls out at bottom upon completion of squeezing operation. And by particular Worthington construction, their press, using but 700 lbs. water pressure, equals the performance of apparatus using from 4000 lbs. to 5000 lbs.

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Laidlaw Works, Cincinnati, Ohio.

Hastleton Works,

Hastleton, Pa.

Gas Engine Works, Culberty, W. Va.
Power & Mining Works
Culberty, W. Va.
Snow-Holly Works
Buffalo, N. Y.
Epping-Carpenter, Pittsburgh, Pa.

NEW YORK MARKET PRICES

LIVE CATTLE.

Steers, common to good.....	7.75@14.75
Cows, ordinary to choice.....	3.00@ 8.00
Bulls, ordinary to choice.....	5.75@ 8.00
Heifers, fair to choice.....	Not quoted

LIVE CALVES.

Calves, veals, com. to good, per 100 lbs.....	14.00@20.50
Calves, veals, culls, per 100 lbs.....	11.00@13.00
Calves, fed, per 100 lbs.....	9.00@10.00

LIVE SHEEP AND LAMBS.

Lambs, ordinary to prime, 100 lbs.....	11.00@14.25
Sheep, ewes, prime, per 100 lbs.....	3.50@ 6.50
Yearlings, per 100 lbs.....	8.00@10.00
Sheep, culls, per 100 lbs.....	@ 2.50

LIVE HOGS.

Hogs, heavy.....	@17.00
Hogs, medium.....	@18.00
Hogs, 140 lbs.....	@18.00
Pigs.....	@17.00
Roughs.....	@14.00

DRESSED BEEF.

CITY DRESSED.

Choice, native, heavy.....	@28	@30
Choice, native, light.....	@28	@30
Native, common to fair.....	@28	@27

WESTERN DRESSED BEEF.

Choice, native, heavy.....	@28	@29
Choice, native, light.....	@29	@30
Native, common to fair.....	@22	@23
Choice, Western, heavy.....	@23	@24
Choice, Western, light.....	@18	@19
Common to fair, Texas.....	@17	@18
Good to choice heifers.....	@20	@21
Common to fair heifers.....	@18	@19
Choice cows.....	@14	@15
Common to fair cows.....	@12	@13
Fresh Bologna bulls.....	@12	@13

BEEF CUTS.

	Western	City
No. 1 ribs.....	@32	@34
No. 2 ribs.....	@24	@34
No. 3 ribs.....	@16	@32
No. 1 loins.....	@40	@44
No. 2 loins.....	@20	@42
No. 3 loins.....	@18	@38
No. 1 hinds and ribs.....	@37	@36
No. 2 hinds and ribs.....	@32	@35
No. 3 hinds and ribs.....	@24	@29
No. 1 rounds.....	@25	@24
No. 2 rounds.....	@18	@23
No. 3 rounds.....	@11	@22
No. 1 chucks.....	@18	@22
No. 2 chucks.....	@11	@18
No. 3 chucks.....	@ 8	@16

DRESSED CALVES.

Veals, city dressed, good to prime, per lb.....	@32
Veals, country dressed, per lb.....	@30
Western calves, choice.....	@28
Western calves, fair to good.....	@24
Grassers and buttermilks.....	@17

DRESSED HOGS.

Hogs, heavy.....	@24
Hogs, 180 lbs.....	@25
Hogs, 160 lbs.....	@25
Hogs, 140 lbs.....	@25
Pigs.....	@25

DRESSED SHEEP AND LAMBS.

Lambs, choice, spring.....	@29	@30
Lambs, choice.....	@28	@29
Sheep, choice.....	@14	@16
Sheep, medium to good.....	@12	@14
Sheep, culls.....	@ 9	@11

PROVISIONS.

(Jobbing Trade.)

Smoked hams, 10 lbs. avg.....	@36	@37
Smoked hams, 12@14 lbs. avg.....	@36	@37
Smoked picnic, light.....	@26	@27
Smoked picnic, heavy.....	@24	@25
Smoked shoulders.....	@25	@26
Smoked beef tongue, per lb.....	@48	@52
Smoked bacon (rib in).....	@35	@36
Smoked beef cuts.....	@45	@52
Pickled bellies, heavy.....	@38	@50

FRESH PORK CUTS.

Fresh pork loins, city.....	None
Frozen pork loins.....	@41
Fresh pork tenderloins.....	None
Frozen pork tenderloins.....	None
Shoulders, city.....	None
Butts, regular, Western, frozen.....	@28
Butts, regular, fresh, city.....	@29
Butts, boneless, Western, frozen.....	None
Fresh hams, city.....	None
Fresh picnic hams, Western.....	@24

BONES, HOOFS AND HORNS.

Round shin bones, avg. 48 to 50 lbs.....	135.00@150.00
Flat shin bones, avg. 40 to 45 lbs. per 100 pcs.....	125.00@140.00
Black hoofs, per ton.....	85.00@ 95.00
Striped hoofs, per ton.....	85.00@ 95.00
White hoofs, per ton.....	125.00@135.00
Thigh bones, avg. 85 to 90 lbs. per 100 pcs.....	150.00@160.00
Horns, avg. 7 1/2 os. and over, No. 1.....	250.00@300.00
Horns, avg. 7 1/2 os. and over, No. 2.....	200.00@225.00
Horns, avg. 7 1/2 os. and over, No. 3.....	125.00@175.00

BUTCHERS' SUNDRIES.

Fresh steer tongues, L. C., trim'd.....	@42c.	a pound
Fresh steer tongues, untrimmed.....	@32c.	a pound
Calves heads, scalded.....	@70c.	a piece
Sweetbreads, veal.....	@75c.	a pair
Sweetbreads, beef.....	@60c.	a pound
Beef kidneys.....	@15c.	a pound
Mutton kidneys.....	@15c.	a pound
Livers, beef.....	@18c.	a pound
Oxtails.....	@14c.	a pound
Hearts, beef.....	@ 8c.	a pound
Rolls, beef.....	@20c.	a pound
Tenderloin beef, Western.....	@75c.	a pound
Lamb's trim.....	@12c.	a pair
Extra lean pork trimmings.....	@28c.	a pound

BUTCHER'S FAT.

Ordinary shop fat.....	3
Suet, fresh and clean.....	7
Shop bones, per cwt.....	25

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	@2.00
Sheep, imp., medium wide, per bundle.....	@1.60
Sheep, imp., narrow, per bundle.....	@1.35
Hog, free of salt, tcs. or bbls., per lb., f. o. b. New York.....	@1.40
Hog, extra narrow, selected, per lb.....	@1.75
Hog middles.....	@26
Hog buns, export.....	@27
Beef rounds, domestic, per set, f. o. b. New York.....	@25
Beef rounds, export, per set, f. o. b. New York.....	@25
Beef buns, f. o. b. New York.....	@24
Beef middles, per set, f. o. b. New York.....	@40
Beef, weasands, No. 1s, each.....	@10
Beef bladders, small, per doz.....	@1.25
Beef weasands, No. 2s, each.....	@ 4

SPICES.

	Whole.	Ground.
Pepper, Sing., white.....	25	27
Pepper, Sing., black.....	14	17
Pepper, red.....	27	31
Allspice.....	17	11 1/2
Cinnamon.....	17	21
Coriander.....	4 1/2	7
Cloves.....	38	43
Ginger.....	18	21
Mace.....	42	47

CURING MATERIALS.

	Bags.	Bbls.
Refined saltpetre, granulated.....	13 1/2	14
Refined saltpetre, small crystals.....	14	15
Dbble. ref. nitrate soda, gran., carloads.....	6	6 1/2
Dbble. ref. nitrate soda, gran., less carloads.....	6 1/2	6 1/2
Dbble. ref. nitrate soda, crystal, carloads.....	6 1/2	6 1/2
Dbble. ref. nitrate soda, crystal, less carloads.....	7	7 1/2
Double refined nitrate of soda and saltpetre in kegs, 100 to 150 lbs. net, 1c over above prices.		

GREEN CALFSKINS.

No. 1 skins.....	@.25
No. 2 skins.....	@.23
No. 3 skins.....	@.10
Branded skins.....	@.18
Ticky skins.....	@.18
No. 1 B. M. skins.....	@.23
No. 2 B. M. skins.....	@.21
No. 1, 9 1/2@12 1/2 lbs.....	@3.00
No. 2, 9 1/2@12 1/2 lbs.....	@2.80
No. 1 B. M., 9 1/2@12 lbs.....	@2.80
No. 2 B. M., 9 1/2@12 lbs.....	@2.60
Branded skins, 9 1/2@12 1/2 lbs.....	@2.10

Ticky skins, 9 1/2@12 lbs.....	@2.10
No. 1, 12 1/2@14 lbs.....	@3.75
No. 2, 12 1/2@14 lbs.....	@3.50
No. 1 B. M., 12 1/2@14 lbs.....	@3.50
No. 2 B. M., 12 1/2@14 lbs.....	@4.25
No. 1 kip, 14@18 lbs.....	@4.00
No. 2 kips, 14@18 lbs.....	@4.00
No. 1 B. M., 14@18 lbs.....	@4.00
No. 2 B. M., 14@18 lbs.....	@3.75
No. 1 heavy kips, 18 lbs. and over.....	@4.75
No. 2 heavy kips, 18 lbs. and over.....	@4.50
Branded kips.....	@3.50
Heavy branded kips.....	@3.50
Ticky kips.....	@3.00
Heavy ticky kips.....	@3.50

All skins must have tail bone cut.

DRESSED POULTRY.

FRESH KILLED.

Fowls—Fresh—dry packed, milk fed—12 to box.	
Western, 60 lbs. and over to dozen, lb.....	@42
Western, 48 to 56 lbs. to dozen, lb.....	@40
Western, 43 to 47 lbs. to dozen, lb.....	@38
Western, 36 to 42 lbs. to dozen, lb.....	@36
Western, 30 to 35 lbs. to dozen, lb.....	@32
Western, under 30 lbs. to dozen, lb.....	@30
Fowls—Fresh—dry packed, corn fed—12 to box.	
W'n, 60 lbs. and over to dozen, lb.....	@41
Western, 48 to 56 lbs. to dozen, lb.....	@39
Western, 43 to 47 lbs. to dozen, lb.....	@37
Western, 36 to 42 lbs. to dozen, lb.....	@35
Western, 30 to 35 lbs. to dozen, lb.....	@31
Western, under 30 lbs. to dozen, lb.....	@29
Fowls—Fresh—Iced—Barrels.	
Western, dry picked, 5 lbs. and over, lb.....	@40
Western, dry picked, 4 1/2 lbs. each, lb.....	@38
Western, dry picked, 4 lbs. each, lb.....	@37
Western, dry picked, 3 1/2 lbs. each, lb.....	@35
W'n, dry picked, 3 lbs. and under, lb.....	@29
Old Cocks—Fresh—dry packed—boxes or bbls.	
Western, dry picked, lb.....	@27
Western, scalded.....	@26
Ducks—	
Long Island, spring, lb.....	@38
Squabs—	
Prime, white, 10 lbs. to doz., doz.....	10.00
Prime, white, 9 lbs. to doz., doz.....	9.00
Prime, white, 8 lbs. to doz., doz.....	8.00
Prime, white, 7 lbs. to doz., doz.....	7.00
Prime, white, 6 to 6 1/2 lbs. to doz.....	5.00@5.50
Dark, per dozen.....	3.50@4.00
Culls, per dozen.....	1.50@2.00

LIVE POULTRY.

Fowls, colored, via express.....	not quoted
Broilers, colored and mixed, via express.....	" "
Broilers, white leghorn, via express.....	" "
Old roosters, via freight.....	" "
Turkeys, via freight.....	" "
Ducks, via freight.....	" "
Geese, Southern and Southwest, via freight.....	" "
Pigeons, per pair, via freight.....	" "
Guineas, per pair.....	" "

BUTTER.

Creamery (92 score).....	@62 1/2
Creamery (higher scoring lots).....	@63 1/2
Creamery, firsts.....	@55 1/2
Creamery, seconds.....	@47
Creamery, lower grades.....	@45

EGGS.

Fresh gathered, extras, per dozen.....	@67
Fresh gathered, extra firsts.....	@66
Fresh gathered, firsts.....	@65
Fresh gathered, seconds.....	@58
Fresh gath. checks, good to choice, dry.....	@47
Fresh gathered dirties, No. 1.....	@51

FERTILIZER MARKETS.

BASIS NEW YORK DELIVERY.

Bone meal, steamed, 3 and 50, per ton.....	@50.00
Bone meal, raw, per ton.....	@52.00@55.00
Dried blood, high grade.....	@ 7.25
Nitrate of soda—spot.....	@ 3.25
Bone black, discarded, sugar house det New York.....	nom. 45.00@52.00
Ground tankage, N. Y. 8 to 12 per cent.....	6.75@7.00 and 10c
Garbage tankage.....	@10.50
Fish scrap, dried, 11 per cent ammonia and 15 per cent bone phosphate, delivered, Baltimore.....	6.00@6.50 and 10c
Foreign fish guano, testing 13@14 per cent ammonia and about 10 per cent B. Phos.....	7.00 and 10c
Lime.....	@ 7.00
Wet, acidulated, 7 per cent ammonia per ton, f.o.b. factory (35c. per unit available phos. acid).....	5.00 and 50c
Sulphate ammonia, for shipment, per 100 lbs. guar., 25 per cent.....	@ 4.75
Sulphate ammonia, for shipment, per 100 lbs. guar., 25 per cent.....	@ 4.75

